

**Department of Epidemiology  
Student Handbook  
2023-2024**

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# INFORMATION ABOUT THE DEPARTMENT OF EPIDEMIOLOGY

## Mission and Goals

### Mission Statement

The Department of Epidemiology strives to improve public and personal health by conducting innovative research addressing the magnitude, determinants, prevention and management of disease and injury and its consequences; educating researchers and public health practitioners; and collaborating with clinicians, communities, and public health agencies in the measurement and evaluation of health status and prevention effectiveness.

### Vision Statement

The Department of Epidemiology will be an academic and public resource for measurement and improvement of human health in communities and other populations.

### 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 achieves 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, social epidemiology, chronic diseases such as cancer, cancer control, cancer etiology, neurological disease, mental health, psychiatric disorders, occupational and environmental health epidemiology, cardiovascular 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. Elizabeth Chrischilles, who is responsible for administration of the educational, research, and professional service functions of the department. Dr. Ryan Carnahan is the Director of Graduate Studies.

Executive staff includes Department Administrator Cindy Rohret, Human Resources Coordinator Michele Hogue, Graduate Program Coordinator Megan Riley, Research Support Specialist Amy Pegump, Research Support Manager Jenell Lentz, Research Support Specialist Katrina Oaklander, and Administrative Services Coordinator Paige Davison.

For primary faculty office and e-mail addresses visit the [Epidemiology Faculty](#) page.

## 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. The Epidemiology Student Association aims to promote the study and use of epidemiological theory and techniques of practice, as well as increase the awareness of occupational and educational opportunities, foster collaboration and comradery among Epidemiology students and faculty, and promote professionalism in Epidemiology. Representatives are elected to act as liaisons with departments and colleges.

## **College of Public Health Graduate Student Ambassadors**

[Graduate Student Ambassadors](#) represent a diverse group of students that strive to inspire, connect with, and represent, past, present, and future College of Public Health graduate students.

## **The College of Public Health Graduate Student Association**

The [College of Public Health Graduate Student Association](#) (CPHGSA) 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.

## **The Graduate Student Senate**

[The Graduate Student Senate](#) (GSS) 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.

## **Financing your Education**

### **Cost of Tuition**

Tuition and fee tables are posted on the [Registrar's](#) website.

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

The [Office of Student Financial Aid](#) also provides 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 four types of jobs at UI: 1) hourly employment; 2) staff employment; 3) teaching assistantships (TAs) 4) graduate research assistantships (GRAs)

Epidemiology and CPH employment opportunities will be communicated to students via email and through the weekly Seminar Announcements as they are brought to the department's attention. Emails may come from the Graduate Program Coordinator, the CPH Student Services office, or one of the CPH HR representatives.

In addition to regularly checking email for opportunities, however, students should be checking the University of Iowa's Job Search Website for postings across campus: [Handshake](#). Opportunities posted on Handshake will include hourly positions, teaching assistantships, and graduate research assistantships.

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

All graduate assistantship appointments are governed by the University of Iowa's [COGS](#).

Generally, students on graduate assistantships (GRAs and TAs) 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.

### **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.) for which they are allowed to register per semester.

### **Internship Announcements and External Employment Opportunities**

[The College of Public Health Career Services Office](#) maintains a listing of current internship and employment opportunities in public health. Students are encouraged to check this website often and frequently monitor their email for weekly updates on current internships (sent once a week) and current job postings (sent once a week).

## **Assistance for Students**

### **College of Public Health Information Technology Services**

For assistance with IT services, please see their website here: [Information Technology Services](#)

## **Computer Labs**

The College of Public Health's student designated computer lab is on the second floor of our building and is available for use at any time. Only College of Public Health students can use these facilities. Other university computer labs are available throughout campus, including one at nearby Hardin Library.

## **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 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 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.

## **Email**

Students will be connected to the College of Public Health network individually and added to the Epidemiology Student Group e-mail lists.

University policy specifies that students are responsible for all official correspondence sent to their standard University of Iowa e-mail address (@uiowa.edu). Students receive course information, seminar announcements, job announcements, and program information via uiowa.edu accounts only. Announcements are not distributed to personal email accounts. It is important that students check their university email regularly and frequently so that they are kept aware of any important reminders, updates, deadlines, and opportunities. Faculty and staff will typically not send or respond to emails from a student's non-university email account.

## **Department Website**

The Department of Epidemiology website is located at <https://www.public-health.uiowa.edu/epi/>. It contains information about degree programs, prospective and current students, faculty, staff, and the department's affiliated research centers.

## **Forms**

Commonly used forms are available on the department's website under Current Students, [Student Forms and Resources](#). This webpage also includes student handbooks, important contact information, degree requirements, degree program flow resources, etc. for the current and recent years.

## **Student Commons**

The Student Commons, located on the second floor of CPHB, is available to all College of Public Health students. This space consists of a student commons area, including a kitchenette, a quiet computer lab, and a "noisy" computer lab. 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. These are available on a first-come first-serve basis. Students should bring their own padlock to use these lockers.

## **Student Services Office**

The Student Services office is on the first floor of CPHB (N170 suite). All visitors are encouraged to reach out via email to set up an appointment. The student services suite is where you can find assistance with [Career Services](#), [the MPH Applied Practice Experience](#), and [Global Public Health Opportunities](#).

## **Professional Development Resources**

Both the College of Public Health and the Graduate College offer many Professional Development resources that students are encouraged to take advantage of. Below are a few examples:

- <https://www.public-health.uiowa.edu/mph-professional-development/>
- <https://www.grad.uiowa.edu/professional-development>

## **Career Development**

Work with your advisor, experts in your chosen career field, and a graduate career advisor. These mentors will help you self-assess, consider options broadly, and prepare for your future career. See the Graduate College's website for resources on this: <https://grad.uiowa.edu/grad-success-appointments>.

## **College of Public Health Career Services**

Whether you are working toward a professional degree such as an MPH or would like to continue in academia after your PhD, [CPH Career Services](#) offers students valuable resources and guidance in identifying and pursuing a fulfilling career path.

## **College of Public Health Services for International Students**

[The CPH International Student Board](#) fosters a healthy learning environment by acting as a primary liaison between international students and the College of Public Health community while promoting equity and diversity and providing support through every stage of their transition to Iowa City and the U.S.

## **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](#). If presenting, please send a copy of your abstract along with the request form. Additionally, the College of Public Health provides limited [funding opportunities](#) for travel and development, and the Graduate College also accepts applications for students to apply for funding for [travel and research](#). Students should submit the travel request form with a proposed budget for the trip attached. Funding requests to the Department will not be considered unless students have also shown verification that they have applied (or are applying simultaneously) for the other funding opportunities also available to support student travel.

Students seeking support from the department should apply for departmental assistance and CPH and Graduate College assistance if available.

## **Teaching Resources**

The following programs provide educational opportunities to prepare students for careers in teaching and enhancing current teaching. The Center for the Integration of Research, Teaching, and Learning and Graduate Certificate in College Teaching programs provide certifications for participating students. The Office of Teaching, Learning, & Technology also provides training and consultation for teaching assistants.

- [The University of Iowa Center for the Integration of Research, Teaching, and Learning \(CIRTL\)](#)
- [Office of Teaching, Learning, & Technology](#)
- [Graduate Certificate in College Teaching](#)

## **Writing Center**

Writing at an elevated level is an essential component for success in a career in epidemiology. Exams in courses and advancement tests will require proficient writing with content and style. The Department offers two courses in writing: EPID: 6105 Writing for Medical Journals and EPID:6100 Writing a Grant Proposal. 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 all students consider using 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).

## **Speaking Center**

[The Speaking Center](#), located in the English Philosophy Building, offers quality one-on-one and small group tutoring and consultation to students and instructors on campus who would like to work on any aspect of oral communication.

## **Conversation Center**

[The Conversation Center](#) hosts one-on-one and small group conversation between international and domestic students to build cultural awareness and casual English skills.

## **English as a Second Language**

English as a Second Language (ESL) credit classes are available to UI students whose first language is not English—U.S. as well as international students. International undergraduate students admitted to The University

of Iowa with a TOEFL iBT score lower than 100 (600 paper-based) are required to complete an [English Proficiency Evaluation \(EPE\)](#) before their first registration for classes. Some graduate departments may require students to complete an English Proficiency Evaluation regardless of their TOEFL score. Students are required to complete any ESL coursework specified because of the English Proficiency Evaluation.

Courses are offered in oral skills, pronunciation, grammar, reading, writing, and listening. Students must be enrolled at The University of Iowa to take ESL credit classes. [View course policies and course descriptions](#). These classes are designed to improve students' language skills to enable them to successfully complete academic coursework.

## IMPORTANT ACADEMIC POLICIES AND RESOURCES 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.

### University of Iowa Policies Affecting Students – Office of the Dean of Students

[The Office of the Dean of Students](#) can help with issues such as finding basic needs, or getting needed assistance, and can also help students find out student engagement opportunities and campus programs that might be valuable. There are also important [University of Iowa policies](#) that students should be aware of.

### Administrative Home

Courses in Epidemiology are administered by the College of Public Health. This means that class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by the College of Public Health.

Students wishing to add or drop a course after the official deadline must receive the approval of the Associate Dean for Academic Affairs in the College of Public Health.

### 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 Academic 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 \(II-29.7\)](#).

### Sexual Harassment

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All UI community members are responsible for upholding this mission and contributing to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. The policy in its entirety may be found at [II-4 Sexual Harassment | Operations Manual](#).

If you or someone you know may be a victim of sexual assault, sexual harassment, dating/domestic violence, stalking, or any other behaviors prohibited under this policy, you are strongly encouraged to seek assistance and support. Assistance is available 24 hours a day, 7 days a week, from:

- [Rape Victim Advocacy Program \(RVAP\)](#) -- confidential, certified victim advocacy services, 319-335- 6000
- Domestic Violence Intervention Program (DVIP) -- confidential, certified victim advocacy services, 319-351-1043 or 800-373-1043
- [Women's Resource & Action Center \(WRAC\)](#): WRAC works to create greater equity for individuals and communities of all identities, with a particular focus on women, through activism, social justice initiatives, leadership training, advocacy, service, and personal and professional development.
- Emergency Department, University of Iowa Hospitals and Clinics -- confidential medical services, 319-356-2233
- University of Iowa Department of Public Safety -- law enforcement services, 319-335-5022, or 911 from any campus phone

During business hours, you may also seek assistance from the University of Iowa Office of the Sexual Misconduct Response Coordinator at 319-335-6200.

### Availability of Accommodations for Students with Disabilities

The University of Iowa's Office of Student Disabilities Services can assist with academic adjustments or accommodations needed for all students. Any student eligible for and needing academic adjustments or accommodations under the Americans with Disabilities Act is requested to notify the Graduate Program Coordinator and specific course instructor as soon as possible to make appropriate arrangements. Additional information regarding applying for accommodations, rights and responsibilities, scholarships and awards can be found on the [Student Disabilities Services](#) website.



## **Basic Needs at Iowa**

For campus support and community resources, please see the [Basic Needs at Iowa](https://basicneeds.uiowa.edu/resources). Food security, childcare, health and wellness, mental health, etc. are available for students and they are encouraged to take advantage of these services. More information can be found at: <https://basicneeds.uiowa.edu/resources>

## **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 [Hawk Alert](#). Students may also wish to sign up for electronic warnings through the Hawk Alert system.

## **Department of Epidemiology Tips for 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. A professional workplace attitude and appearance allow students to take pride in their work, improve teamwork and rapport, and improve student performance. Students who conduct themselves professionally avoid crossing the line with their conversations and other interactions with other students, superiors, and clients.

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.

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.

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.

The faculty and staff are here to help you succeed. For us to help you, you need to be honest and forthright about your plans. Violation of trust will 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 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 workspace neat and organized.
- Do not 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 spelling 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. Authorship requirements generally stipulate that every author has read and approved the final submitted version, so this applies to all authors.
- 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.
- 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, but it will also 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 do not 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. Chrischilles.

It is not appropriate to disrupt the productivity of your colleagues in the workplace by complaining about your problems. Counseling services are available through the [University Counseling Service](#). 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.

### **Bringing food for comprehensive exams and defenses/Gift Policy**

Students are not allowed to bring food for their comprehensive exam or thesis defense. If advisors or other committee members wish to bring food they are welcome, but it is not expected. Further, university policy prohibits faculty and staff from receiving gifts of more than \$3 from students and advisees. See the university's [gift policy](#) for more information.

### **Academic Conduct Standards and CPH Procedures for Responding to and Addressing Unethical Conduct and Violations of the Graduate College and Iowa Code of Student Life**

The University of Iowa Code of Student Life, published each year as an insert to The Daily Iowan, governs student non-academic conduct (including graduate students). The Graduate College Manual of Rules and Regulations governs student academic conduct.

Research misconduct, such as the fabrication or falsification of data and plagiarism, is defined by the US Health and Human Services (HHS) Office of Research Integrity (definition of misconduct). Egregious acts of research misconduct may also result in additional action by the University of Iowa as stated in section 27.6, Ethics in Research, of the University's Operations Manual.

Graduate students in the Department of Epidemiology are expected to adhere to all sets of policy guidelines. Students may be sanctioned or dismissed from their program in the event of policy violations.

Please contact the CPH Assistant Dean for Student Services or your Graduate Program Coordinator for further information about these policies.

### **Academic Integrity**

Integrity is a core value of the University of Iowa and the College of Public Health. At the University of Iowa, we hold ourselves to the highest standard of professional and scholarly ethics, are accountable for our decisions and actions, exercise responsible stewardship of the resources with which we are entrusted, and treat one another with honesty and fairness. Academic integrity embodies the principles of honesty, fairness, responsibility, and respect, forming the foundation of ethical scholarship and intellectual growth. Upholding academic integrity is not only essential for maintaining the credibility and integrity of the academic community but also for nurturing individuals who contribute positively to society through their knowledge, skills, and ethical conduct. Academic misconduct undermines the efforts and achievements of other students, erodes the trust and credibility that society places in educational institutions, and can have long-lasting consequences for the individuals involved, especially in post-graduate careers.

Academic integrity is a teaching and learning issue, and our policies and procedures are written in that spirit. Academic misconduct can involve many gray areas. The ways that students are allowed to work with other classmates or utilize additional resources can differ between courses which can lead to confusion. Instructors are responsible for making expectations regarding academic integrity and academic misconduct clear and explicit to students in the course syllabus, assignment instructions, and exam instructions. Students are responsible for actively seeking clarification from their course instructors if they are uncertain about whether a situation might involve academic misconduct.

### **Academic Misconduct Reporting Procedures, Sanctions, and Appeals**

#### **Reporting Academic Misconduct**

Each UI college tracks offenses on a shared database (Maxient), with academic misconduct reports thus shared across UI colleges and with more severe consequences for repeat violations. Incidents of academic misconduct will be investigated and reported in a manner that ensures due process and fairness.

- Instructors: Instructors are required to report incidents of academic misconduct by filing a violation report and notifying the accused student in writing. Instructors should contact the Assistant Dean of Student Services for access to the reporting form.
- Students: a student who witnesses an incident of academic misconduct is expected to report the violation to the course instructor. During any investigation, the reporting student may be asked for additional information. The confidentiality of the reporting student will be protected to the greatest extent possible; however, confidentiality cannot be guaranteed in all cases.

Reports of academic misconduct are shared with the Graduate College, the Assistant Dean of Student Services in the College of Public Health, the Associate Dean for Academic Affairs in the College of Public Health, as well as the Director of Graduate Studies and Departmental Executive Officer (DEO, Department Chair) in the student's home department. Academic misconduct records stored in Maxient are not transferred to the student record in MAUI. However, depending on the result of a case (e.g., dismissal/expulsion), a dean's level note acknowledging academic misconduct as the reason for dismissal/expulsion may be added to the student's MAUI advising notes. Access to dean's level MAUI advising notes is highly restricted and campus advisors (e.g., DGS, DEO, Graduate Program Coordinator, faculty advisors) do not have access to these notes. Notes associated with academic misconduct are not recorded on the student's transcript. Records of academic misconduct violation(s) will be kept for seven years or until the student graduates, whichever comes first.

### **Academic Misconduct Procedures and Sanctions**

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

#### Course-Level Procedures

- An instructor who suspects a student of an incident of academic misconduct will investigate whether the suspected misconduct has, in fact, occurred.
- Instructors who intend to report a student for misconduct should inform the student about their concerns. The instructor will make reasonable attempts to arrange a meeting with the student as soon as is feasible with the student to clarify the situation and to discuss specifics of the incident. The student should be provided the opportunity to respond to the allegation. If the student does not respond or chooses not to meet with the instructor, the instructor should proceed with sanctioning the student (see below) and reporting the incident.
- If the meeting between the instructor and the student ultimately results in no sanction (e.g., grade reduction) because the allegation of academic misconduct is not supported, then 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 record.
- If after meeting with the student the instructor determines that the allegation of academic misconduct is founded, then the instructor will make a decision regarding whether or not a sanction (e.g., grade reduction) will be applied and report the allegation by filing a violation report.
- If the instructor decides not to apply a grade sanction (e.g., issues a warning or provides the student with learning opportunities to address any misunderstandings of academic misconduct), the incident must still be reported.
- Examples of Course-level Sanctions. In the case of academic misconduct that is related to a course, the instructor will determine the appropriate sanction. Sanctions may include but are not limited to:
  - Failing the assignment or assigning a lower grade than otherwise would have been given for the assignment
  - Requesting a revision of the work in question and accepting the revision for grade assignment
  - Failing a student for the course (must only be considered in consultation with the departmental/programmatic administrative home for the course)

Instructors are responsible for making expectations regarding academic integrity and academic misconduct clear and explicit to students in the course syllabus, assignment instructions, and exam instructions.

- The Assistant Dean of Student Services in the College of Public Health will notify the student of any violation report received and the right of the student to request an appeal hearing for review of the case.
- The student may:
  - Accept responsibility and the instructor's sanction.
  - Accept responsibility but appeal the instructor's sanction. Reasons could include inequitable enforcement of the sanction, the sanction is too severe, or the sanction is out of alignment with stated policy in the syllabus.
  - Deny responsibility for the violation and appeal the instructor's sanction.

### Student Appeals of Course-Level Sanctions

- If the student has any questions about the appeals process, then they should contact the Assistant Dean for Student Services in the College of Public Health or their Graduate Program Coordinator. Contact information for the Assistant Dean will be provided in the notification letter. The student may also choose to discuss their situation confidentially with a representative of the Office of the Ombudsperson.
- Appeals must be in writing to the DEO (Department Chair) of the department in which the course is offered within 30 calendar days of written notification of the instructor's finding. An email to the DEO is sufficient.
- The DEO will review the case and submit a decision letter to the student and to the Assistant Dean for Student Services in the College of Public Health.
- If the student is not satisfied with the DEO's decision, the student may then request a review by the Associate Dean for Academic Affairs (ADAA) in the College of Public Health. The request must be written within 30 calendar days of receiving the DEO's finding. An email to the ADAA is sufficient.
- The ADAA will review the case and submit a decision letter to the student and to the Assistant Dean for Student Services in the College of Public Health.
- If the student is not satisfied with prior decisions, then the student has the right to appeal to the Associate Dean for Academic Affairs of the Graduate College, followed by the Office of the Provost, and finally up to the Iowa Board of Regents.
- Copies of the final determination document will be given to the student, kept by the department, and also given to the Assistant Dean for Student Services to be stored in the Maxient system.
- When a conflict of interest in the chain of appeals is identified (e.g., the DEO or ADAA is also the student's instructor, advisor, or supervisor), then an appropriate substitute to hear the appeal will be made.

### Departmental Procedures

In the event that academic misconduct is founded, the student's home department/program will make a determination as to whether or not additional sanctions will be applied by the department/program according to the following procedures:

- Following a report of academic misconduct, the DEO will meet with the student to allow the student an opportunity to discuss the alleged misconduct. The DEO will review the available evidence. After the DEO has reviewed the report the DEO may choose to consult with the DGS and may assign the student additional sanctions (see below) based on the severity of the offense and the number of previous offenses by the student reported to the department. *The DEO may choose to consult with the DGS at any stage in the process.*
  - The student is required to meet with the DEO to discuss the alleged violation(s) and departmental expectations regarding academic integrity. A summary of the violation report will be provided to the student. During the meeting, the DEO will review the sanction imposed by the instructor, review departmental sanctions, and review the appeal process and the deadline to appeal.
- Examples of Departmental Sanctions. Academic misconduct can involve many gray areas and borderline situations. In these cases, the department might combine or change the sanctions listed below so that they better fit the situation. At the department's discretion, egregious acts of misconduct may lead to more severe sanctions than suggested below even for a student's first or second report of misconduct.
  - For first report – The student receives a warning letter in which they are notified of the consequences of any additional offenses related to academic misconduct. The student is required to meet with the Director of Graduate Studies and/or Department Chair (DEO) to discuss the alleged violation(s) and departmental expectations regarding academic integrity. A summary of the

violation report will be provided to the student. During the meeting, the DGS and/or DEO will review the sanction imposed by the instructor, review departmental sanctions, and review the appeal process and the deadline to appeal.

- For second report – The department may require the student to enroll in a non-credit academic integrity seminar. The seminar is completed online, and most students complete the assigned readings and assignments in about 5-15 hours. The student will be charged a course fee of between \$100 and \$200.
- For additional reports – In addition to any penalties listed above, the department may dismiss the student from the graduate program or recommend expulsion from the University. Decisions to dismiss a student from the graduate program or expel the student from the University are made in consultation with the Associate Dean for Academic Affairs of the Graduate College. Dismissal from the program/department may not automatically dismiss a student from the Graduate College.

Students who fail to complete any of the assigned sanctions may be restricted from course registration in future semesters. Degree conferral may be held for students in their final semester of enrollment until they complete their assigned sanctions.

### Student Appeals of Departmental Sanctions

- If the student has any questions about the appeals process, then they should contact the Assistant Dean for Student Services in the College of Public Health or their Graduate Program Coordinator. The student may also choose to discuss their situation confidentially with a representative of the Office of the Ombudsperson.
- Appeals must be in writing to the Associate Dean for Academic Affairs (ADAA) in the College of Public Health within 30 calendar days of written notification of the department's finding. An email to the ADAA is sufficient.
- The ADAA will review the case and submit a decision letter to the student and to the Assistant Dean for Student Services in the College of Public Health.
- If the student is not satisfied with the ADAA's decision, then the student has the right to appeal to the Associate Dean for Academic Affairs of the Graduate College, followed by the Office of the Provost, and finally up to the Iowa Board of Regents.
- Copies of the final determination document will be given to the student, kept by the department, and also given to the Assistant Dean for Student Services to be stored in the Maxient system.
- When a conflict of interest in the chain of appeals is identified (e.g., the ADAA is also the student's advisor or supervisor), then an appropriate substitute to hear the appeal will be made.

## **Department of Epidemiology Policies**

### **Guide for Student Advising Meetings**

To assist students and faculty establish and nurture a mutually beneficial relationship, a [Guide for Student Advising Meetings](#) is available as a resource. This outlines several recommendations on how students can maximize their relationship with their advisor. The guide recommends that students meet regularly with their advisor to steadily progress to graduation within their desired timeframe, to take advantage of resources in the department and the college to assist in educational, professional development, and career goals, and to increase their network.

### **Individual Development Plans**

The department encourages students to fill out Individual Development Plans (IDPs). An Individual Development Plan (IDP) is a student-generated document that lays the foundation for clear and effective communication with mentors. It also helps graduate students and postdoctoral scholars plan and achieve graduate school and career planning milestones. [See here for more information regarding how IDPs can be helpful for both mentees and mentors, IDP template options, and helpful tips.](#)

### **Changing Advisors**

When an applicant is admitted to the Department of Epidemiology, the student is assigned an academic faculty advisor. If a student wishes to change advisors, the student initiates the change by determining which faculty

advisor would be preferred and discussing the possibility with the preferred faculty advisor. Students may also consult with the Director of Graduate Studies should they need help identifying a suitable advisor. Upon approval by the new faculty advisor, the student must then notify the prior advisor and the Graduate Program Coordinator. There is no requirement that a student must remain with the same advisor throughout that student's academic career. Additionally, the thesis/dissertation advisor may be a different faculty member than the academic advisor.

## **Academic Standards**

### **Academic Standing**

MPH students must earn a grade of B- or better (2.67 grade points) on each of the 6 MPH core courses and must earn a 3.00 cumulative Grade Point Average (GPA) or better on those 6 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 a 3.00 cumulative GPA or better. A student with less than a 3.00 GPA 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 and MSCI students are required to earn a 2.75 cumulative GPA or better. A student with less than a 2.75 GPA 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 a 3.00 cumulative GPA or better. A student with less than a 3.00 GPA 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 & PhD students who receive a grade of C+ (2.33 grade points) or lower in more than 6 semester hours of College of Public Health and required courses (including any transfer hours) will be dismissed from the program. A student may appeal against the dismissal in writing to the head of the department. Student appeals must be voted on by the department faculty within 2 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**

First-semester students will be contacted by the Graduate Program Coordinator to initially register for classes. Students should also be in touch with their faculty advisor to review additional classes that might be appropriate for their area of interest. During their first semester, new students will fill out, with their advisor, a [Department Plan of Study](#) which will outline their course of study during their time in program. Once the student and their faculty advisor have agreed on the Plan of Study, it should be submitted to the Graduate Program Coordinator for final review with the Plan of Study committee. If it is complete, either the Graduate Program Coordinator or the advisor can authorize future registration. If a Plan of Study is not on file by the end of the first semester, registration will not be authorized until students outline their program with their advisor.

You may then register online at [MyUI](#) after the time assigned to you. First-year students will not be authorized to register for second semester courses until they have submitted a [Department Plan of Study](#).

## Changing Registration

The Office of the Registrar publishes the [Academic Calendar](#), which can also be found through [MyUI](#). All students must adhere to the deadlines listed on the academic calendar, including deadlines for changes or withdrawals of registration. For specific processes related to Changes of Registration, please see the Office of the Registrar's [Changes of Registration](#) page.

## Maximum Course Load

9 or more semester hours constitutes full-time enrollment during fall and spring semester. 12 semester hours is considered the standard schedule. MS and PhD students may not register for more than 15 semester hours per semester during the fall and spring semesters. Exceptions beyond this limit may be approved by the Graduate College for MPH students in certain scenarios. During the summer sessions, students may not register for more than 8, 6, and 4 semester hours for the 8-week, 6-week, and 4-week summer sessions, respectively.

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 the fall and spring semesters, 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 Student and Scholar Services](#) (ISSS) 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 (excluding summer and winter sessions). 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 is applied to the following courses:

- EPID:7000 Thesis or Dissertation
- EPID:6000 Independent Study
- EPID:6050 Research in Epidemiology
- EPID: 5950 Preceptorship in Epidemiology
- EPID: 7200 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 advisor approve the registration. Arrangements for S/U grading in these courses are accomplished by [filing the Grading Option 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. The grade designation of ‘AUS’ is assigned when a student registered for zero credit attends as an auditor throughout the course; if the student fails to meet the instructor’s auditing requirements, a grade designation of ‘AUU’ is assigned. The student and instructor should agree upon auditing requirements prior to registration.

### **Plan of Study**

Students are expected to make steady and satisfactory progress toward the degree. An Epidemiology Department Plan of Study must be filed in the first semester of the student’s program. Students should complete the [Plan of Study](#) and submit it in person to their advisor.

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 and signed by the student and the student’s advisor and submitted to the graduate program coordinator for review. The student and her/his advisor 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**

Students may make changes to their Plan of Study by submitting a Request for [Change in Plan of Study](#) form found on the online website. Requested changes must be approved by the Plan of Study Committee, which meets regularly throughout the academic year to review new Plans of Study including requests for course waivers, transfer credits, and changes to previously approved Plans of Study.

### **Changing Degree Programs**

Students may request to change their degree program within the Department after speaking with their faculty advisor and contacting the Graduate Program Coordinator. The request will be reviewed by faculty. If approved, the Graduate Program Coordinator will initiate a [Change of Status](#) with the Graduate College so that the student information system is updated appropriately.

While students may change degree programs (i.e., MS in Epi to MPH in Epi), students may not change departments or subprograms without reapplying to the department that they would like to switch their degree program to.

### **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. 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 are generally sufficient. Waiver requests are reviewed by the Plan of Study committee for approval.

### **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, 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 “B” or better;
- Courses may not be more than 10 years old at the time of graduation from the program for Master’s degree students, or by the time of the comprehensive examination for PhD students.

## **Graduation**

### **Application for Degree**

Students are required to apply for graduation on MyUI by the posted deadline of the session (fall, spring, or summer) the student intends to graduate. The Graduate Program Coordinator will work with graduating students to file the applicable Graduate College 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 the degree.

### **Graduation Deadlines**

Students may find all Graduation deadlines in the [Academic Calendar](#) published by the Office of the Registrar. Students need to know the Application for Degree deadline and the Graduate College Plans of Study, Final Examination, Thesis deposit deadlines.

### **Registration in Final Semester**

The Graduate College requires enrollment during the session where your degree is conferred. To meet this requirement, MS students who have completed all their coursework may register for Master’s Final Registration (GRAD:6001 for 1 hour) or for any course of interest. PhD candidates may register for Doctoral Continual Registration (GRAD:6003 for 1 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 and walk during the December or May ceremony, but there is no summer commencement ceremony. The College of Public Health Graduation Ceremony is held in the spring semester only and includes students graduating that academic year (e.g., prior Fall, current Spring, future Summer).

## 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 2 decades or threatens to increase in the near future. Dr. Christine Petersen directs the center.

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

[HERCe](#) is a collaborative research enterprise between the Department of Epidemiology and the College of Pharmacy which studies whether 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](#) conduct 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. Dr. James Torner is the director of the center.

### **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. Mary Charlton, is 1 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.

# MPH – EPIDEMIOLOGY SUBTRACK DEGREE INFORMATION

## Degree Objectives

The Master of Public Health (MPH) in Epidemiology degree is for students who desire to learn the fundamental concepts and methods of epidemiology. The degree provides methodological skills, knowledge, and practical experience in a 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 fulfill the core MPH competencies, as well as the following competencies:

- Summarize the role of a public health laboratory in the public health system
- Select an appropriate statistical approach based on epidemiologic study design
- Use population-based surveillance data to describe a community health issue
- Prepare an Institutional Review Board (IRB) application for human subjects research
- Use common software to build an electronic data collection tool
- Design an epidemiologic study that meets ethical standards, minimizes biases, and maximizes the potential for causal inference
- Critically appraise the scientific literature

## Degree Requirements

### MPH Core Courses (18 s.h.)

The following coursework is required for all MPH students. Students are expected to earn a 'B' (2.67 grade points) or better on each of the core courses, as well as earn at least a 3.0 cumulative grade point average in the core. When necessary, a student may repeat courses to achieve this standard, however, the original grade will not be removed in the calculation of the GPA.

CPH:5100	Introduction to Public Health	3 s.h.
BIOS:4120	Introduction to Biostatistics	3 s.h.
CBH: 4105	Introduction to Health Promotion and Disease Prevention	3 s.h.
EPID:4400	Epidemiology I: Principles	3 s.h.
HMP:4000	Introduction to the US Healthcare System	3 s.h.
OEH:4240	Global Environmental Health	3 s.h.

### Interprofessional Education Courses

Students are required to participate in one semester of interprofessional education (during the Fall semester of their 2<sup>nd</sup> year in the program):

CPH:5203	Interprofessional Education Practice for MPH Students III	0 s.h.
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### Applied Practice Experience (2 s.h.)

This requirement is a fieldwork experience in which students show proficiency in applying academic principles in community settings. There are many applied practice opportunities for MPH students locally, nationally, and internationally. The Director of Applied Practice Experience is Jeanie Kimbel. MPH students do not register for the applied practice experience until their MPH core courses have been completed.

Before they register for and begin the applied practice experience, students must propose a topic for approval. Students need to prepare early and work with the Director to ensure approval for registration in the desired semester. A final written report with an oral presentation or a poster presentation is required. Students will register for CPH:7500 MPH Applied Practice Experience (2 s.h.) during the semester they complete the practice experience.

### Capstone Experience (1 s.h.)

Students must complete the capstone experience in the final semester. Students will register for CPH:7200 MPH Capstone Experience (1 s.h.) during the fall or spring semester. If students graduate during the summer, students

will complete the Capstone Experience and register for CPH:7200 during the spring semester before graduating.

### **Bioscience Requirement (3 or 4.sh.)**

If a student has had such coursework in the past, a bioscience course may not need to be taken, but the hours are replaced with more hours of elective coursework upon approval by the Plan of Study committee.

PATH:8133 Introduction to Human Pathology for Graduate Students\* 3 s.h.

\*Students with a strong biosciences background may choose to substitute PATH:5270 Pathogenesis for Major Human Diseases for this course if it fits better with their training plan. This is an advanced course that requires a solid foundation in molecular biology and related disciplines but may be suitable for some students.

### **Required Courses (17 s.h.)**

In addition, the core courses and bioscience requirement, students must complete the following courses:

BIOS:5120	Regression and ANOVA in Health Sciences	3 s.h.
EPID:5540	Public Health Surveillance Mechanisms, Applications, and Data	3 s.h.
EPID:5580	Public Health Laboratory Techniques	1 s.h.
EPID:5600	Introduction to Epidemiology Data Management and Analysis	3 s.h.
EPID:5610	Intermediate Epi Data Analysis SAS & R	3 s.h.
EPID:6400	Epidemiology II: Advanced Methods	4 s.h.

### **Elective courses (minimum of 3 s.h.)**

An additional number of approved elective courses must be taken to complete the 44 s.h. total required for the MPH degree. At least 3 s.h. must be taken from Epidemiology course offerings (EPID) or from the following Biostatistics courses:

BIOS:6310	Introductory Longitudinal Data Analysis	3 s.h.
BIOS:6210	Applied Survival Analysis	3 s.h.

### **Total Credit Hours Required for the MPH Degree in Epidemiology: 44 s.h.**

#### ***Undergraduate to Graduate Program***

Students in their 4<sup>th</sup> year (senior year) can take up to 17 s.h. that year toward the requirements for the MPH degree in Epidemiology. Admitted students to the undergraduate to graduate program should work very closely with their undergraduate advisor and the Departmental Graduate Program Coordinator to register for classes to avoid any conflicts in their 5<sup>th</sup> year. Below is listed when the MPH core courses are offered and the EPID required core courses to help with planning purposes (this can be subject to change):

#### **MPH Core Courses**

- CPH:5100 Introduction to Public Health – Fall (in person); Summer (online)
- BIOS:4120 Introduction to Biostatistics – Fall (in person and online); Spring (in person and online); Summer (online)
- CBH:4105 Introduction to Health Promotion and Disease Prevention – Fall (online); Spring (in person)
- EPID:4400 Epidemiology 1: Principles – Fall (in person and online), Spring (online), Summer (online)
- HMP:4000 Introduction to the U.S. Healthcare System – Spring (in person); Summer (online)
- OEH:4240 Global Environmental Health – Fall (in person); Spring (online)

#### **EPID Subprogram Core (Required)**

- BIOS:5120 Regression and ANOVA in Health Sciences – Fall (online), Spring (in person)
- EPID:5925 Journal Club – Fall, Spring (in person)
- EPID:5540 Public Health Surveillance Mechanisms, Applications, and Data – Fall (in person)
- EPID:5600 Introduction to Epidemiology Data Management and Analysis – Fall (in person)
- EPID:6400 Epidemiology II: Advanced Methods – Spring (in person)
- PATH:8133 Introduction to Human Pathology for Graduate Students – Fall (in person)

## **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 will be scheduled for Thursdays from 11:30-12:20. The Seminar director and student coordinator can be found in [Student Forms and Resources](#). Information about the schedule is distributed each semester via email and is also available on the [University Events Calendar](#).

Students are expected to achieve at least 80% attendance at the Department of Epidemiology Seminar during each semester of enrollment.

### **First Semester Journal Club**

The First Semester Journal Club is for students new to the Department and is offered in the Fall semester. The focus of the Journal Club is experience in reading, interpretation, and critically evaluating recently published journal articles. The students should register in the course EPID:5925:0001 Epidemiology Journal Club.

### **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 Journal Club director and student coordinator can be found in [Student Forms and Resources](#). Information about the schedule is distributed to students at the beginning of each semester. MPH students are required to achieve at least 80% attendance at the Department of Epidemiology Journal Club for 3 semesters during their time in the program.

### **Scientific Poster Requirement**

Every MPH – Epidemiology student is required to present at least 1 scientific poster at the department level and is also encouraged to participate in international, national, regional, state, or university level, at some point in the student's program before graduation. The poster can be the same poster as presented on the MPH Applied Practice Poster Session. The poster must be submitted for review to the student's advisor or thesis/preceptorship mentor a minimum of 10 days (about 1 and a half weeks) before the poster session. A Department of Epidemiology poster session is held at the end of the fall and spring semesters. If students do their Applied Practice during the summer semester, they must either present during the fall or spring Epidemiology poster session or ensure that Epidemiology faculty are present to review their poster during the MPH Applied Practice Poster Session during the summer.

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

Under most circumstances, at least 24 semester hours must be completed after admission to the department from courses delivered by 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 is 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 MS program will be able to fulfill the following competencies:

- Define the concepts and content of epidemiology
- Formulate a research hypothesis
- Determine a study aim, objectives, and appropriate design to address a hypothesis
- Apply concepts of ethics to research practice
- Develop study procedures and data collection instruments for conducting a study
- Collect data and manage data quality
- Use existing databases to provide supportive data to address a research question
- Analyze data for a research study
- Compose an understandable and presentable report of research results

### Degree Requirements

#### Required Courses (31 s.h.)

CPH:6100	Essentials of Public Health	2 s.h.
BIOS:4120	Introduction to Biostatistics	3 s.h.
EPID:5610	Intermediate Epidemiology Data Analysis with SAS and R	3 s.h.
BIOS:5120	Regression and ANOVA in Health Sciences	3 s.h.
EPID:4400	Epidemiology I: Principles	3 s.h.
EPID:5600	Introduction to Epidemiology Data Management and Analysis	3 s.h.
EPID:6400	Epidemiology II: Advanced Methods	4 s.h.
CPH:7270	Principles of Scholarly Integrity: Public Health (2 semesters required, 0 s.h. taken during fall, 1 s.h. taken during spring semester)	1 .sh.
PATH:8133	Introduction to Human Pathology*	3 s.h.
Select one from the following:		
EPID:6550	Epidemiology of Infectious Diseases	3 s.h.
EPID:6600	Epidemiology of Chronic Diseases	3 s.h.
Select one from the following:		
EPID:5950	Preceptorship in Epidemiology	3 s.h.
EPID:7000	Thesis	3-6 s.h.

\*Students with a strong biosciences background may choose to substitute PATH:5270 Pathogenesis of Major Human Diseases for this course if it fits better with their training plan. This is an advanced course that requires a solid foundation in molecular biology and related disciplines but may be suitable for some students.

#### Epidemiology Electives (8 s.h.)

A minimum of 5 s.h. of electives must be selected from any Epidemiology course offerings (EPID). In addition, students will work with their advisor in selecting at least 2 s.h. of elective coursework pertinent to educational goals and background. Selection may be made from Epidemiology courses or any graduate courses in the university catalog provided prior approval is obtained by the advisor on the student's Plan of Study.

#### Suggested College of Public Health Electives

BIOS:6310	Introductory Longitudinal Data Analysis	3 s.h.
BIOS:6210	Applied Survival and Cohort Data Analysis	3 s.h.
CBH:5220	Health Behavior and Health Education	3 s.h.
HMP:4000	Introduction to US Healthcare System	3 s.h.
OEH:4240	Global Environmental Health	3 s.h.

**Total Credit Hours Required for the MS Degree in Epidemiology: 39 s.h.**

## CPH: Principles of Scholarly Integrity: Public Health

All CPH MS and PhD students in Community & Behavioral Health, Epidemiology, Health Management and Policy, and Occupational and Environmental Health are required to take the course **CPH:7270 Principles of Scholarly Integrity: Public Health**. MS and PhD students in the Department of Biostatistics take a similar course, BIOS:7270 Scholarly Integrity in Biostatistics.

CPH:7270 should be completed during the first academic year as a graduate student. During the fall semester students will register for 0 s.h. and during spring semester for 1 s.h. Further requirements: the course must be completed if it has been more than 4 years since it was first taken, or when switching degrees, say from MS to PhD.

The course is considered completed after two requirements are fulfilled: (1) CITI training online, and (2) attending class-based lectures and related discussions held over two semesters.

1. The CITI training is offered through a Graduate College web portal located here: <https://grad.uiowa.edu/postdocs/training-rcr/approved-courses/>. **DO NOT** go to the Human Subjects Office website (<http://hso.research.uiowa.edu/certifications-human-subjects-protections-citi>) to complete this training. Follow the instructions to obtain the course information and take the quizzes. You must score 80% or greater on each module. A screen will show all quiz scores on one page. You must take a screen shot of those quiz results as proof of completing the course and upload it to the ICON course site under the "Assignments" section. **DO NOT** follow the instructions on the Graduate College website (Step 8) to send the screen shot to "your course director or your faculty mentor." **CITI training must be completed before the first in-person session.** If you completed the CITI training last year, you will need to register for the class-based course this fall and again next spring to complete the course. **Additionally, you must still upload the screenshot to the ICON course site as verification you have successfully completed the training.**
2. The class-based course consists of two, two-hour time blocks offered on Friday afternoons. Students will be given instructional materials to review before each class and expected to participate in discussions related to each session's theme.

## 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 will be scheduled on Thursdays from 11:30-12:30. Contact information for the coordinators for seminar can be found on the Epidemiology website under [Student Forms and Resources](#). Information about the schedule is distributed via email each semester and is also available on the [University Events Calendar](#).

Students are expected to achieve at least 80% attendance at the Department of Epidemiology Seminar during each semester of enrollment.

### First Semester Journal Club

First Semester Journal Club is for students new to the Department and offered in the Fall semester. The focus of the Journal Club is experience reading, interpretation and critically evaluating recently published journal articles. The students should register in course, EPID:5925:0001 Epidemiology Journal Club.

### 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. Contact information for the coordinators for Journal Club can be found on the Epidemiology website under [Student Forms and Resources](#). Information about the schedule is distributed to students at the beginning of each semester. MS students are required to achieve at least 80% attendance at the Department of Epidemiology Journal Club for 3 semesters during their time in the program.

### Scientific Poster Requirement

Every Epidemiology MS 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 advisor or thesis/preceptorship mentor can help determine the suitability and timeline for the poster presentation. Sources of posters can be Preceptorship research, Thesis research, or 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 10 days (about 1 and a half weeks) 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.

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

Under most circumstances, at least 24 semester hours must be completed after admission to the department and from courses delivered by 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 MS 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 MS Final Examination if applicable (see below under Master's Final Examination). A student wishing to petition should contact the Graduate Program Coordinator.

### **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 geographic site. [See here for a comprehensive list of the preceptorship guidelines.](#)

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. The Preceptorship Course Director for the academic year can be found on the Epidemiology website under [Student Forms and Resources.](#)

#### Preceptorship advisor

The preceptorship advisor is the faculty member who directly supervises the student's project. The advisor should be a primary faculty member in the Department of Epidemiology. 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 section.

#### Prior to starting the preceptorship

The student completes a [preceptorship prospectus](#) which must be approved by her/his preceptorship advisor and the preceptorship course director, and the form is signed by both. 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 form should be submitted to the Graduate Program Coordinator.

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 report and then submit it to the Graduate Program Coordinator and the Preceptorship Course Director.

### Grading

At the end of the preceptorship the preceptorship advisor or advisor-of-record will assign the final grade. Preceptorships are graded as S/U (satisfactory or unsatisfactory).

### Master's Final Examination

The master's examination is a written in-class examination that is 3 hours in length and is multiple choice, short essay, and problem solving. The examination is offered twice per year, students who need to take the exam typically do so during the semester the student plans to receive the degree. The examination may be repeated just one time. Failing the examination two times will result in dismissal from the program.

The examination is a test covering competencies expected of graduates at the M.S. level. It is recommended that students review material from the epidemiology core courses (EPID:4400 Epidemiology I; EPID:6400 Epidemiology II; and BIOS:5120 Regression and ANOVA in Health Sciences). You may contact instructors of each course to review the coursework before the exam.

Non-thesis MS students who receive a 'B' (3.0 grade points) or better in each of the three courses above are not required to take the exam.

## **MS Degree with Thesis**

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

The student must comply with Graduate College guidelines regarding preparation of the thesis and meeting 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 student's responsibility, including associated costs like copying.

### Examining Committee

The student is responsible for obtaining a thesis adviser interested in 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 member 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 or have temporary Graduate College faculty appointments in the case of clinical faculty—the chair 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 1 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](#). Students are advised to meet with committee members to discuss their research plan prior to this meeting to increase the likelihood that the prospectus will be approved. Prospectus development is typically an iterative process involving several rounds of feedback from the committee; it is not uncommon to have two or three committee meetings before the final prospectus defense meeting.

### **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 MS thesis defense is an oral presentation of the purpose, methods, and results of the thesis research, followed by questions and comments from attendees and committee members. 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 MS thesis defense is interpreted as an insufficient attempt at the thesis. The committee may encourage the student to improve the thesis or to abandon it. The thesis defense may be repeated just one time.

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 thesis deposit requirement.

### **Thesis Deadlines**

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

- At least 2 weeks before the thesis defense the committee should receive the thesis document.
- At least 5 weeks before the Graduate College thesis deposit deadline the thesis defense should be held. Note that the Graduate College thesis deposit deadline is absolute, and no exceptions are made for any reason. If the deadline is missed, graduation moves to the next semester. Please do not wait to submit your thesis until the deadline day. This will give the Graduate College time to review the thesis to determine if it is complete, and to notify you if there are missing materials that will need to be submitted before the deadline.
- At least 3 weeks before the thesis deposit the committee should receive the proposed final draft with tracked changes and a description of responses to committee questions and recommendations.
- Students are responsible for submitting the thesis to the Graduate College through the thesis submission process and are responsible for ensuring that the committee certifications are received by the Graduate College through electronic workflow. The rules/regulations for thesis submissions can be found in the [Graduate College Thesis and Dissertation Manual](#).

The thesis submission deadline, as well as all other deadlines related to degree completion and graduation, can be found on the [Academic Calendar](#) which is published by the Office of the Registrar.

## MS - CLINICAL INVESTIGATION – DEGREE INFORMATION

The program, offered with the University’s Institute for Clinical and Translational Science, is designed for clinicians interested in pursuing careers in clinical research. Applicants must hold a doctoral-level degree in a clinical discipline (e.g., M.D., DoO., D.D.S., Ph.D., Pharm.D., D.V.M.) or be enrolled in a health science professional program. They must hold a baccalaureate degree with a cumulative GPA of at least 3.00; foreign-trained applicants must have an outstanding doctoral training record evidenced by research publications, presentations, or a grade of ‘B’ or better on Introduction to Biostatistics and Epidemiology I: Principles.

### Degree Objectives

Graduates of the program will acquire proficiency in the conduct of independent clinical research, including hypothesis development, study design, knowledge of research ethics, survey development, data collection, basic and advanced statistical analyses, and interpretation of results. At program completion, clinical scholars will be able to critically evaluate clinical literature, write a competitive grant proposal, design and conduct a clinical research project, work effectively with other researchers and support staff, and disseminate research results through scientific manuscripts and presentations.

Graduates of the MS in Clinical Investigation will be able to fulfill the following competencies:

1. Discuss issues related to biomedical informatics impacting clinical research.
2. Summarize requirements for building and maintaining a multidisciplinary research team.
3. Describe health and disease measurement in clinical and community populations.
4. Describe how to implement a clinical research study.
5. Develop a clinical research question.
6. Apply principles of responsible research and clinical research ethics to a research project.
7. Use computers to collect, manage, and analyze data for evaluation of hypotheses.
8. Determine a study aim, objectives, and appropriate design to address a hypothesis.
9. Analyze data using appropriate statistical techniques.
10. Analyze literature to identify gaps in knowledge.
11. Communicate clinical research findings effectively in writing and oral presentation.

The coursework schedule proposed allows the scholar to complete the requirements in about two years while maintaining clinical activities.

### Degree Requirements

#### Prerequisites

The MS in Clinical Investigation degree requires at least 6 credit hours from pathology, physiology, and/or pharmacology. Students accepted into the MS in Clinical Investigation Program who have not had at least 6 hours of pathology/physiology/pharmacology may concurrently take the necessary courses to meet the requirements during enrollment in the program.

#### Required General Courses (27 s.h.):

BIOS:4120	Introduction to Biostatistics	3 s.h.
EPID:4400	Epidemiology I: Principles	3 s.h.
BIOS:5120	Regression and ANOVA in Health Sciences	3 s.h.
EPID:5500	Introduction to Clinical Epidemiology	3 s.h.
EPID:5610	Intermediate Epidemiology Data Analysis with SAS and R	3 s.h.

EPID:6000	Independent Study in Epidemiology (for the Capstone requirement, see below)	2 s.h.
EPID:6150	Writing for Medical Journals	1 s.h.
EPID:6400	Epidemiology II: Advanced Methods	4 s.h.
EPID:6950	Clinical Research Ethics	2 s.h.
CPH:6100	Essentials of Public Health	2 s.h.
CPH:7270	Principles of Scholarly Integrity (see below, taken first year in the fall and spring semesters for 0 s.h. and 1 s.h. respectively)	1 s.h.

### **Electives (10 s.h.)**

Students must earn a minimum of 10 s.h. in elective course work, which must include at least 6 s.h. in a research interest area.

### **Highly Recommended Electives:**

In addition to 6 s.h. of research interest area electives, the following courses are highly recommended electives:

EPID:5214	Meta-Analysis of Epidemiologic Studies	3 s.h.
EPID:6100	Writing a Grant Proposal	3 s.h.
EPID:6900	Design of Intervention and Clinical Trials	3 s.h.
EPID:6910	Pharmacoepidemiology and Comparative Effectiveness Research	3 s.h.

### **Research Interest Area Electives**

#### **Clinical and Health Services Epidemiology**

EPID:4990	Practicing Evidence-Based Public Health	3 s.h.
EPID:6360	Nutrition Intervention in Clinical Trials Research	2 s.h.
EPID:6900	Design of Intervention and Clinical Trials	3 s.h.
EPID:6910	Pharmacoepidemiology and Comparative Effectiveness Research	3 s.h.
BIOS:6610	Statistical Methods in Clinical Trials	3 s.h.
BIOS:7600	Advanced Biostatistics Seminar	0-3 s.h.
CBH:6205	Designing and Implementing Interventions	3 s.h.
PCOL:5136	Pharmacogenetics and Pharmacogenomics	1 s.h.
PHAR:7100	Translational Research and Clinical Drug Development	3 s.h.

#### **Nutrition Science**

EPID:6330	Global Nutrition Policy	1,3 s.h.
EPID:6350	Nutritional Epidemiology	2 s.h.
EPID:6360	Nutrition Intervention in Clinical Trials Research	2 s.h.
EPID:6370	Nutrition Intervention in Research Lb	3 s.h.

#### **Epidemiology**

EPID:5560	Introduction to Molecular Epidemiology	3 s.h.
EPID:5570	Zoonotic Diseases	3 s.h.
EPID:6071	Social Epidemiology	3 s.h.
EPID:6510	Injury Epidemiology	3 s.h.
EPID:6530	Epidemiology of Occupational Injuries	3 s.h.
EPID:6550	Epidemiology of Infectious Diseases	3 s.h.
EPID:6560	Hospital Epidemiology	2 s.h.

EPID:6600	Epidemiology of Chronic Diseases	3 s.h.
EPID:6640	Epidemiology of Maternal and Infant Health	2 s.h.
EPID:6650	Cardiovascular Disease Epidemiology	3 s.h.
EPID:6670	Psychiatric Epidemiology	3 s.h.
EPID:6700	Cancer Epidemiology and Control	3 s.h.
DPH:6004	Principles of Oral Epidemiology	2 s.h.
GEOG:3110	Geography of Health	3 s.h.

### **Informatics**

EPID:5200	Principles of Public Health Informatics	3 s.h.
EPID:5600	Introduction to Epidemiology Data Management and Analysis	3 s.h.
HMP:5315	Health Information Systems	2 s.h.
HMP:5370/IGPI:5200	Health Informatics I	3 s.h.

### **Community Studies**

CBH:5235	Community-Based Participatory Research	3 s.h.
CBH:5305	Evaluation: Approaches and Applications	3 s.h.
CBH:6205	Designing and Implementing Interventions	3 s.h.
EPLS:5135	Introduction to Program and Project Evaluation	3 s.h.

### **Statistical Methods**

BIOS:6210	Applied Survival Analysis	3 s.h.
BIOS:6310	Introductory Longitudinal Analysis	3 s.h.
EPID:6920	Applied Administrative Data Analysis	2 s.h.

### **Outcomes and Health Services Research**

HMP:5410	Health Economics I	3 s.h.
HMP:7550	Cost Effectiveness and Decision Analysis	3 s.h.
HMP:7960	Analytic Issues in Health Services Research I	3 s.h.
HMP:7965	Analytic Issues in Health Services Research II	3 s.h.

### **Pharmacy Science**

PHAR:5310	Pharmaceutical Socioeconomics Seminar	1-2 s.h.
PHAR:5350	Introduction to Research Methods	3 s.h.
PHAR:6305	Foundation Literature in Pharmaceutical Socioeconomics	ARR

**Total Credit Hours Required for the MS degree in Clinical Investigation: 37 s.h.**

### **Principles of Scholarly Integrity Course (CPH:7270)**

All CPH MS and PhD students in Community & Behavioral Health, Epidemiology, Health Management and Policy, and Occupational and Environmental Health are required to take the course CPH:7270 Principles of Scholarly Integrity: Public Health. MS and PhD students in the Department of Biostatistics

take a similar course, BIOS:7270 Scholarly Integrity in Biostatistics.

CPH:7270 should be completed during your first academic year as a graduate student. During the fall semester you will register for 0 s.h. and during spring semester you will register for 1 s.h. Further requirements: the course must be completed if it has been more than 4 years since it was first taken, or when switching degrees, say from MS to PhD.

The course is completed after fulfilling two requirements: (1) CITI training to be completed online, and (2) attending class-based lectures and related discussions held over two semesters.

- (1) The CITI training is offered through a Graduate College web portal located here: <https://grad.uiowa.edu/postdocs/training-rcr/approved-courses/>. **DO NOT** go to the Human Subjects Office website (<http://hso.research.uiowa.edu/certifications-human-subjects-protections-citi>) to complete this training. Follow the instructions to obtain the course information and take the quizzes. You must score 80% or greater on each module. A screen will show all quiz scores on one page. You must take a screen shot of those quiz results as proof of completing the course and upload it to the ICON course site under the “Assignments” section. **DO NOT** follow the instructions on the Graduate College website (Step 8) to send the screen shot to “your course director or your faculty mentor.” **CITI training must be completed before the first in-person session.** If you completed the CITI training last year, you would need to register for the class-based course this fall and again next spring to complete the course. **Additionally, you must still upload the screenshot to the ICON course site as verification you have successfully completed the training.**
- (2) The class-based course consists of two, two-hour time blocks offered on Friday afternoons. You will be given instructional materials to review before each class and be expected to participate in discussions related to each session's theme.

### **Capstone Requirement (EPID:6000 Independent Study)**

While no final examination of courses will be taken, the student's evaluation for graduation is based on a positive review by their advisor of 1) a mentored K or R grant or 2) a mentored publishable research paper. This grant or paper is completed in the second year of the program and based on the area of focus. This is a mentored activity which requires approval by a clinical mentor and an Epidemiology Department primary faculty member. Approval is communicated through the Independent Study form. The complete grant or paper will be due no later than one month before graduation for review.

## PHD – EPIDEMIOLOGY DEGREE INFORMATION

The PhD 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. A course each in medical physiology and pathology is required to provide a basic understanding of disease processes. In addition, each student works with an adviser to select courses that ensure substantive knowledge in a specific area which will generate important original research. An independent but finite research experience is required aside from the dissertation. This is done with EPID:6050 Research in Epidemiology.

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 PhD in Epidemiology will be able to achieve the following competencies:

1. Summarize specific risk factor and disease processes in a specialized area
2. Describe methods for primary data collection including quality assurance and quality control
3. Use advanced statistical analysis methods appropriate for the study design and controlling for confounding variables
4. Develop data collection instruments for research purposes
5. Develop hypotheses that build upon literature and theoretical models of disease and causation
6. Conduct an independent research project
7. Compose a proposal for grant funding
8. Communicate epidemiological concepts and methods in both writing and orally
9. Defend the methods, results, and implications of a research study

### Degree Requirements

#### Prerequisites

A baccalaureate degree is required and a master's degree in epidemiology or a related public health discipline is generally required. Courses in the biological, physical, and mathematical sciences provide important background course work and are highly recommended. This includes one semester of calculus and two semesters of biological sciences. Computing skills are desirable.

#### Required Courses (43-44 s.h.)

CPH:6100	Essentials of Public Health	2 s.h.
BIOS:4120	Introduction to Biostatistics	3 s.h.
EPID:4400	Epidemiology I: Principles	3 s.h.
BIOS:5120	Regression and ANOVA in Health Sciences	3 s.h.
EPID:5600	Introduction to Epi Data Management and Analysis	3 s.h.
EPID:5610	Intermediate Epi Data Analysis with SAS and R	3 s.h.
EPID:6050	Research in Epidemiology	3 s.h.
EPID:6100	Writing a Grant Proposal	3 s.h.
EPID:6400	Epidemiology II: Advanced Methods	4 s.h.
EPID:6655	Causal Inference	3 s.h.
EPID:7400	Epidemiology III: Theories**	3 s.h.
CPH 7270	Principles of Scholarly Integrity: Public Health	1 s.h.
PATH:8133	Introduction to Human Pathology*	3 s.h.

Choose 1 of the following 2 courses:



BIOS:6310	Introductory Longitudinal Data Analysis	3 s.h.
BIOS:6210	Applied Survival Analysis	3 s.h.
Choose 1 of the following 2 courses:		
HHP:3500	Human Physiology	3 s.h.
MPB:5153	Graduate Physiology	4 s.h.

\*Students with a strong biosciences background may choose to substitute PATH:5270 Pathogenesis of Major Human Diseases for this course if it fits better with their training plan. This is an advanced course that requires a solid foundation in molecular biology and related disciplines but may be suitable for some students.

\*\*EPID:7400 Epidemiology III will not be taught as a 3 s.h. course in 2023-2024. During 2023-24, a 1 s.h. Epidemiology III seminar is being pilot-tested under the course number EPID:5900 Problems and Special Topics in Epidemiology which will likely be reflected in a 1 s.h. EPID:7400 in the future. During 23-24, PhD students that have not taken EPID:7400 should take EPID:5900 Problems and Special Topics in Epidemiology: The Contemporary Epidemiologist in the Fall semester and EPID:6655 Causal Inference in the Spring semester.

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

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

### Recommended Research Interest Area Plans of Study

#### Chronic Disease/Lifecourse Epidemiology

Students interested in chronic disease/lifecourse epidemiology will take the following three courses:

EPID:5500 Introduction to Clinical Epidemiology	3 s.h.
EPID:5560 Biomarkers and Epidemiology	3 s.h.
EPID:6600 Epidemiology of Chronic Disease	3 s.h.

In addition, students will complete at least 14 s.h. from the following recommended courses. Students should select courses in consultation with their advisor to reflect their research interest area (e.g., cancer, cardiovascular disease, diabetes, aging, neurologic disorders, musculoskeletal disorders, etc)

EPID:5540 Public Health Surveillance Mechanisms, Applications and Data	3 s.h.
EPID:6000 Independent Study in Epidemiology	2 s.h.
EPID:6071 Social Epidemiology	3 s.h.
EPID: 6075 Health Equity and Social Justice	3 s.h.
EPID:6350 Nutritional Epidemiology	2 s.h.
EPID:6360 Nutrition Intervention in Clinical Trials Research	2 s.h.
EPID:6370 Nutrition Intervention in Research Lab	3 s.h.
EPID:6420 Survey Design and Analysis	3 s.h.
EPID:6900 Design of Intervention and Clinical Trials	3 s.h.
EPID:6910 Pharmacoepidemiology and Comparative Effectiveness Research	3 s.h.
EPID:6950 Clinical Research Ethics	2 s.h.
CBH:5220 Health Behavior and Health Education	3 s.h.
CBH:5435 Substance Abuse Prevention and Early Intervention	3 s.h.
CBH:6205 Designing and Implementing Interventions	3 s.h.
FRRB:7001 Molecular and Cellular Biology of Cancer	3 s.h.
GENE:7191 Human Molecular Genetics	3 s.h.
GEOG:4150 Health and Environment: GIS Applications	3 s.h.
OEH:4240 Global Environmental Health	3 s.h.
OEH:5710 Environmental Toxicology	3 s.h.

**Total Research Interest Area Electives 23 s.h.**

### **Clinical and Health Services Epidemiology**

Students interested in clinical and health services epidemiology will take the following four courses:

EPID:5500 Introduction to Clinical Epidemiology	3 s.h.
EPID: 6910 Pharmacoepidemiology and Comparative Effectiveness Research	3 s.h.
EPID:6920 Applied Administrative Data Analysis	2 s.h.
HMP:4000 Introduction to US Healthcare System	3 s.h.

In addition, students will choose at least 14 s.h. from the following recommended courses. Students should select courses in consultation with their advisor to reflect their research interest area (e.g., pharmacoepidemiology, comparative effectiveness, clinical trials, health services research, or outcomes research).

EPID:5214 Meta-analysis of Epidemiologic Studies	3 s.h.
EPID:5560 Introduction to Molecular Epidemiology	3 s.h.
EPID:6071 Social Epidemiology	3 s.h.
EPID:6360 Nutrition Intervention in Clinical Trials Research	2 s.h.
EPID:6900 Design of Intervention and Clinical Trials	3 s.h.
BIOS:5310 Research Data Management	3 s.h.
BIOS:6210 Applied Survival Analysis	3 s.h.
BIOS:6310 Introductory Longitudinal Data Analysis	3 s.h.
EPID:6420 Survey Design and Analysis	3 s.h.
BIOS:6610 Statistical Methods in Clinical Trials	3 s.h.
BIOS:6650 Causal Inference	3 s.h.
CBH:6205 Designing and Implementing Interventions	3 s.h.
EPLS:5165 Introduction to Program and Project Evaluation	3 s.h.
GEOG:4150 Health and Environment: GIS Applications	3 s.h.
HMP:7550 Cost Effectiveness and Decision Analysis	3 s.h.
HMP:7940 Primary Data and Mixed Methods	3 s.h.
HMP:7960 Analytical Issues in Health Services Research I	3 s.h.
HMP:7965 Analytical Issues in Health Services Research II	3 s.h.
PCOL:4130 Drug Mechanisms and Actions	3 s.h.
PCOL:5136 Pharmacogenetics and Pharmacogenomics	1 s.h.
<b>Total Research Interest Area Electives</b>	<b>25 s.h.</b>

### **Infectious Disease Epidemiology**

Students interested in infectious disease epidemiology will take the following 2 courses:

EPID:6550 Epidemiology of Infectious Diseases	3 s.h.
EPID:5560 Introduction to Molecular Epidemiology	3 s.h.

In addition, students will choose at least 17 s.h. from the following recommended courses. Students should select courses in consultation with their advisor to reflect their research interest area (e.g., microbiology, immunology, vaccinology, entomology, ecology, behavioral health, pharmacoepidemiology, or clinical trials):

EPID:5550 Diagnostic Microbiology for Epidemiology*	3 s.h.
EPID:5570 Zoonotic Diseases*	3 s.h.
EPID:6560 Hospital Epidemiology*	2 s.h.
EPID:6900 Design of Intervention and Clinical Trials*	3 s.h.
EPID:6570 Infectious Causes of Chronic Disease*	3 s.h.
GEOG:4150 Environment and Health: GIS Applications	3 s.h.
ANTH:3326 Infectious Disease and Human Evolution	3 s.h.
MICR:6267 Graduate Viruses and Human Disease	4 s.h.
MICR:6247 Graduate Immunology and Human Disease	4 s.h.
MICR:6259 Graduate Bacteria and Human Disease	3 s.h.
EPID:6920 Applied Administrative Data Analysis	2 s.h.
IGPI:5220 Principles of Public Health Informatics	3 s.h.
EPID:6910 Pharmacoepidemiology and Comparative Effectiveness Research	3 s.h.
STAT:6560 Applied Time Series Analysis	3 s.h.
<b>Total Research Interest Area Electives</b>	<b>23 s.h.</b>

\* Students are strongly encouraged to take these courses.

In addition to the recommended courses listed above, it is strongly recommended that students work as

research assistants for an infectious diseases study.

### **Injury Epidemiology**

Students interested in injury epidemiology will take the following three courses:

EPID:4510 Injury and Violence Prevention 3 s.h.

EPID:6510 Injury Epidemiology 3 s.h.

EPID:6530 Epidemiology of Occupational Injuries 3 s.h.

In addition, students will choose at least 14 s.h. from the following recommended courses. Students should select courses in consultation with their advisor to reflect their research interest area (e.g., unintentional injury and violence prevention, occupational and environmental epidemiology, program/intervention development and evaluation, pharmacoepidemiology, or behavioral health):

BIOS:6110 Applied Categorical Data Analysis 3 s.h.

BIOS:6650 Comparative Effectiveness Research Methods for Observational Data 3 s.h.

BIOS:5120 Regression Modeling and ANOVA in the Health Sciences 3 s.h.

CBH:5220 Health Behavior and Health Education 3 s.h.

CBH:5235 Community Based Participatory Research 3 s.h.

CBH:5305 Evaluation: Approaches and Applications 3 s.h.

CBH:5310 Qualitative Research for Public Health 3 s.h.

CBH:6205 Designing and Implementing Interventions 3 s.h.

EPID:6071 Social Epidemiology 3 s.h.

EPID:6075 Health Equity and Social Justice 3 s.h.

EPID:6420 Survey Design and Analysis 3 s.h.

EPID:6920 Applied Administrative Data Analysis 2 s.h.

OEH:4310 Occupational Ergonomics: Principles 3 s.h.

OEH:4530 Global Road Safety 3 s.h.

OEH:5410 Occupational Safety 3 s.h.

GEOG:4150 Health and Environment: GIS Applications 3 s.h.

**Total Research Interest Area Electives 23 s.h.**

### **Molecular and Genetic Epidemiology\*\***

Students interested in molecular and genetic epidemiology will take the following course:

EPID:5560 Biomarkers in Epidemiology 3 s.h.

Students will choose 1 course from the following (if students choose to take both, the other will be considered an approved recommended research interest area elective):

EPID:6550 Epidemiology of Infectious Diseases 3 s.h.

EPID:6600 Epidemiology of Chronic Diseases 3 s.h.

Students will choose 1 course from the following (if students choose to take more than 1 or all 3, the additional courses will be considered an approved recommended research interest area of electives):

EPID:6920 Applied Administrative Data Analysis 2 s.h.

EPID:5214 Meta-Analysis of Epidemiologic Studies 3 s.h.

EPID:6420 Survey Design and Analysis 3 s.h.

In addition, students will complete 16-17 s.h. from the following recommended courses. Students should select courses in consultation with their advisor to reflect their research interest area (e.g. infectious diseases, chronic diseases, pharmacoepidemiology, clinical epidemiology, hospital epidemiology, psychiatric epidemiology, or clinical investigation):

ANTH:3325 Human Evolutionary Genetics 3 s.h.

ANTH:3326 Infectious Disease and Human Evolution 3 s.h.

ANTH:3328 Molecular and Genetics of Human Disease 3 s.h.

ANTH:3307 Modern Human Origins 3 s.h.

ANTH:3308 Human Variation 3 s.h.

BIOL:3172 Evolution 4 s.h.

BIOL:4333 Genes and Development 3 s.h.

BIOL3713 Molecular Genetics 4 s.h.

BIOL:3373 Human Population Genetics and Variation 3 s.h.

BIOL:4213 Bioinformatics 4 s.h.

BIOL:4373 Molecular Evolution: Genes, Genomes, and Organisms 3 s.h.

BIOL:3314 Genomics	3 s.h.
BIOL:5412 Fundamental Genetics	3 s.h.
BIOL:5320/GENE:5173 Computational Genomics	3 s.h.
BME:5320 Bioinformatics Techniques	3 s.h.
EPID:5550 Diagnostic Microbiology for Epidemiology	3 s.h.
EPID:6570 Infectious Causes of Chronic Disease	3 s.h.
EPID:6560 Hospital Epidemiology	2 s.h.
EPID:6350 Nutritional Epidemiology	2 s.h.
GENE:6150 Genetic Analysis of Biological Systems	3 s.h.
GENE:6234 Basic Biostatistical Methods in Genetic Apps	1 s.h.
GENE:7191 Human Molecular Genetics	3 s.h.
HHP:4450 Genetic Basis of Disease	3 s.h.
MCB:6215 Transcription RNA	1 s.h.
MCB:6217 Epigenetics, Cancer, and Mouse Models	1 s.h.
ACB:6220/MMED:6220 Mechanisms of Cellular Organization	3 s.h.
MCB:6225 Growth Factor Receptor Signaling	1 s.h.
MCB:6226 Cell Cycle Control	1 s.h.
MCB:6227 Cell Fate Decisions	1 s.h.
MCB:6240 Inflamm Cell Signal and Targeted Cancer Therapy	1 s.h.
MCB:6260 Graduate Molecular Microbiology	3 s.h.
MCB:6279 Graduate Bacterial Diversity and the Human Microbiome	3 s.h.
PCOL:5135 Principles of Pharmacology	1 s.h.
PCOL:5136 Pharmacogenetics and Pharmacogenomics	1 s.h.
<b>Total Research Interest Area Electives</b>	<b>25 s.h.</b>

\*\*Students interested in Molecular and Genetic Epidemiology should also review the suggested plans of study for Infectious Disease Epidemiology and Chronic Disease/Lifecourse Epidemiology.

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

In addition, the student must select at least 3 s.h. from Epidemiology course offerings (EPID) outside the student's research interest area.

### **Dissertation Requirement (10-18 s.h.)**

EPID:7000 Dissertation	10-18
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### **Total Credit Hours for the PhD in Epidemiology: 78 s.h.**

#### ***Medical Science Training Program (MSTP) Requirements***

MSTP students follow an abbreviated version of the degree requirements to achieve the PhD in Epidemiology. Students transfer 22 s.h. of approved coursework from their Carver College of Medicine curriculum to their College of Public Health degree which lowers the number of elective courses that MSTP students are required to take. The requirements for MSTP students pursuing the PhD in Epidemiology are listed below:

- **Required Courses (35 s.h.):** MSTP students complete all the required courses listed above except for:
  - PATH:8133 Introduction to Pathology (3 s.h.)
  - HHP:3500 Human Physiology (3 s.h.)
- **Approved Transfer Work from MD Curriculum (22 s.h.):**
  - ACB:8101 Medical Gross Anatomy (5 s.h.)
  - MED:8122 Medicine and Society (3 s.h.)
  - MED:8123 Foundations of Cellular Life (5 s.h.)
  - MED:8124 Mechanisms of Health and Disease I (5 s.h.)
  - MED:8132 Medicine and Society II (4 s.h.)

- **Interest Area Electives (minimum of 6 s.h.)**  
In consultation with their Epidemiology advisor, students must select elective courses in an established research interest area below that aligns with their epidemiologic interests and

professional goals.

- Chronic Disease/Lifecourse Epidemiology
- Clinical and Health Services Epidemiology
- Molecular and Genetic Epidemiology
- Infectious Disease Epidemiology
- Injury Epidemiology

*Below is a list of highly recommended electives for MSTP students:*

- EPID:5500 Introduction to Clinical Epidemiology (3 s.h.)
- EPID:6910 Pharmacoeconomics and Comparative Effectiveness Research (3 s.h.)
- EPID:6920 Applied Administrative Data Analysis (2 s.h.)
- EPID:6050 Clinical Research Ethics (2 s.h.)
- EPID:6900 Design of Intervention and Clinical Trials (3 s.h.)
- EPID:7200 Teaching Epidemiology (3 s.h.)

- **Dissertation (10-15 s.h.)**

- EPID:7000 Thesis (variable, multiple semesters)

## **Principles of Scholarly Integrity: Public Health (CPH:7270)**

All CPH MS and PhD students in Community & Behavioral Health, Epidemiology, Health Management and Policy, and Occupational and Environmental Health are required to take the course **CPH:7270 Principles of Scholarly Integrity: Public Health**. MS and PhD students in the Department of Biostatistics take a similar course, BIOS:7270 Scholarly Integrity in Biostatistics.

CPH:7270 should be completed during your first academic year as a graduate student. During the fall semester you will register for 0 s.h. and during spring semester you will register for 1 s.h. Further requirements: the course must be completed if it has been more than 4 years since it was first taken, or when switching degrees, say from MS to PhD.

The course is completed after fulfilling two requirements: (1) CITI training to be completed online, and (2) attending class-based lectures and related discussions held over 2 semesters.

1. The CITI training is offered through a Graduate College web portal located here: <https://grad.uiowa.edu/postdocs/training-rcr/approved-courses/>. **DO NOT** go to the Human Subjects Office website (<http://hso.research.uiowa.edu/certifications-human-subjects-protections-citi>) to complete this training. Follow the instructions to obtain the course information and take the quizzes. You must score 80% or greater on each module. A screen will show all quiz scores on 1 page. You must take a screen shot of those quiz results as proof of completing the course and upload it to the ICON course site under the "Assignments" section. **DO NOT** follow the instructions on the Graduate College website (Step 8) to send the screen shot to "your course director or your faculty mentor." **CITI training must be completed before the first in-person session.** If you completed the CITI training last year, you will need to register for the class-based course this fall and again next spring to complete the course. **Additionally, you must still upload the screenshot to the ICON course site as verification you have successfully completed the training.**
2. The class-based course consists of two, two-hour time blocks offered on Friday afternoons. You will be given instructional materials to review before each class and be expected to participate in discussions related to each session's theme.

## **Non-Course Program Requirements**

### **Preceptorship Requirement**

Doctoral students who did not complete the MS Epidemiology program at UI will be required to take EPID:5950 Preceptorship or demonstrate that an equivalent course has been completed (such as completing a thesis at the student's master's institution) This requirement must be fulfilled within one year of admission to the PhD program.

### **Department of Epidemiology Seminar**

Every week during the fall and spring semesters, Epidemiology Seminar provides a forum for speakers to present information or research pertaining to diverse topics in epidemiology. Seminars will be scheduled on Thursdays from 11:30-12:30. Contact information for the coordinators for Journal Club can be found on the Epidemiology website under [Student Forms and Resources](#). Students are expected to achieve at least 80% attendance at the Department of Epidemiology Seminar during each semester of enrollment.

### **First Semester Journal Club**

First Semester Journal Club is for students new to the Department. The focus of the Journal Club is experience reading, interpretation and critically evaluating recently published journal articles. The students should register in course, EPID:5925:0001 Epidemiology Journal Club. PhD students who have experience doing journal reviews or who have taken an equivalent of Epidemiology I: Principles may ask to participate in the regular Journal Club.

### **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. Contact information for the Journal Club coordinators can be found on the Epidemiology website under [Student Forms and Resources](#). Information about the schedule is distributed to students at the beginning of 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 PhD student must present at least one scientific poster at the department level and one at the international, national, regional, state, or university level, 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 must present 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.

### **Residence Requirement**

Of the minimum 78 required semester hours contributing to the PhD degree, at least 39 semester hours must be earned while enrolled in the University of Iowa Graduate College and after formal program admission. This requirement cannot be met by work completed under the non-degree or non-departmental student classification or with transfer credit.

### **Timelines and Examinations**

The PhD in Epidemiology requires the successful completion of 4 milestones: the Epidemiology Qualifying Exam, the Comprehensive Exam, the Dissertation Prospectus Defense Meeting, and the Final Dissertation Defense. Details regarding each exam can be found below.

### **PhD Degree Flow Diagram**

It is a goal that the PhD student progress energetically through the program and graduate with papers

published and in review. Thus, it is important that the student begins immediately to conduct research. See below for an example of how a student might complete each of the major PhD degree program milestones toward graduation.

Year in PhD program	Fall	Spring	Summer
1	<ul style="list-style-type: none"> <li>Required Coursework</li> </ul>	<ul style="list-style-type: none"> <li>Required Coursework</li> <li>Independent Study</li> </ul>	<ul style="list-style-type: none"> <li>Research in Epidemiology</li> </ul>
2	<ul style="list-style-type: none"> <li>Qualifying Exam*</li> <li>Writing a Grant Proposal</li> <li>Other Required and Elective Coursework</li> </ul>	<ul style="list-style-type: none"> <li>Causal Inference</li> <li>Other Required and Elective Coursework</li> </ul>	<ul style="list-style-type: none"> <li>Dissertation research</li> </ul>
3	<ul style="list-style-type: none"> <li>Prospectus defense meeting (<math>\pm</math>1<sup>st</sup> EPID:7000 Thesis hours)</li> <li>Comprehensive Exam**</li> </ul>	<ul style="list-style-type: none"> <li>Dissertation research</li> </ul>	<ul style="list-style-type: none"> <li>Dissertation research</li> </ul>
4	<ul style="list-style-type: none"> <li>Dissertation research</li> </ul>	<ul style="list-style-type: none"> <li>Dissertation research or defense</li> </ul>	<ul style="list-style-type: none"> <li>Dissertation research or defense</li> </ul>

\*Students who took EPID:6400 Epidemiology II and EPID:5241 Stat Methods in Epi or BIOS:5120 Regression and ANOVA as a University of Iowa Master's degree student could take the qualifying examination during Fall of Year 1

\*\* The comprehensive examination and drafting of the dissertation prospectus should be started **after all** required courses and most of the elective coursework has been completed for the PhD degree. While they can be completed in the same semester with meticulous planning, it is not uncommon for students to complete these milestones in different semesters.

### PhD Qualifying Examination

The intent of the PhD Qualifying Examination is to evaluate mastery over the core Epidemiology material covered in the first year of the program and also to examine the student's writing ability during the early stages of the program. In doing so, the qualifying exam can help the department identify any gaps that should be addressed or interventions that may be necessary to successfully complete the dissertation.

The exam should be taken in the fall of the second year of the program OR after the student has completed the epidemiology core courses (EPID:4400 Epidemiology I; EPID:6400 Epidemiology II; and BIOS:5120 Regression and ANOVA in Health Sciences). Doctoral students who have not taken the three Epi core courses by Fall of Year 2 of the program (i.e. are part-time students or students who had to take a leave of absence) should take it no later than Fall of Year 3 of the program.

PhD students must receive a 'B' (3.0 grade points) or better in each of the three core courses above or if they have transferred or waived out of EPID:4400 and BIOS:5120 and received a 'B' or better in EPID:6400. If they do not, they will be required to study for and take the MS Final Examination. To transfer or waive either EPID:4400 or BIOS:5120 students must meet with the instructors of both courses for approval and receive approval from the Plan of Study committee.

The Qualifying Examination is an 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, study, design, analytic thinking, and clear scientific writing. If a candidate fails the examination they may re-take the exam one time.

To prepare for the exam, students are encouraged to review the eight core competencies **and** the coursework from the three core courses (the instructors can be contacted for access to coursework materials).

## **Timetable**

The examination is offered in the fall semester annually, but if a retake is needed, students may attempt it again the following spring. Students wishing to sit for the examination must inform the Graduate Program Coordinator by September 15 (for fall semester) or March 1 (for spring semester).

## **PhD Comprehensive Examination**

The comprehensive examination can be taken after all required courses and most of the elective coursework has been completed for the PhD degree. Students who are following a full-time plan of study should look to successfully complete the comprehensive exam by the end of their third year in the program

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 2 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 research interest 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 research interest area. The committee will meet to:

1. Select 2-3 articles for the article critique.
  - 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 research interest 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.
  - 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 2 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 take 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. The written exam will be due at least 1 week and not more than 2 weeks before the oral exam. Moving the date of the oral exam will require approval in advance.

## **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/identify the authors' main result.
- Evaluate the role of confounding and bias in the study, including both internal and external validity. Comment on any positive features that bolster study conclusions.
- Discuss the appropriateness of the statistical methods.
- Discuss mechanistic plausibility of any effect modification, interaction, or mediation, if presented
- 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 research interest area. A full research proposal is *not* expected. Rather, committee members should identify 5-8 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, mediators if applicable, and their corresponding measures
- Quality assurance
- Statistical methods – propose and defend modeling approaches
- 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**

It is the responsibility of the student to identify their comprehensive exam committee members and determine their willingness to serve on the committee, as well as a mutually agreeable schedule for the exam. If the student plans to take the PhD Comprehensive Examination, the student must submit an [intent form](#) to the Graduate Program Coordinator.

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 Program Coordinator. Students must be registered during the semester that the oral defense is held in. Students may schedule the oral defense in the two-week window after the summer semester has ended and the fall semester begins if they are registered in the fall semester. This timetable allows students to complete the take-home portion of the exam in the summer semester or winter session while they may not be registered and defend their comps during the following semester (if they are registered in the following semester).

### **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 must register each fall and spring semester after passing the PhD 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 GRAD:6003 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 dissertation's goal is to produce scholarly epidemiologic work publishable in a peer-reviewed journal. Original thought is required in the research's formulation and conduct, although neither original data collection nor analysis is required. The research must be clearly recognizable as epidemiologic research. 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 must comply with Graduate College guidelines regarding format and preparation of the dissertation and meeting Graduate College dissertation deadlines. 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 student's responsibility, including associated costs like copying.

***Per the Manual of Rules and Regulations of the Graduate College, all students regardless of registration status (full or part-time) must complete the dissertation within 5 years after completing the Comprehensive Exam.***

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

The student is responsible for obtaining a dissertation adviser interested in the intended research area. 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, if 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 (three of these members must be University of Iowa tenure/tenure track and at least two of the three 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 must be approved by the Graduate 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 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 throughout the course of the student's work.

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 appropriate.

### **Dissertation Prospectus and Defense**

The dissertation prospectus describes the aims and rationale for the proposed epidemiology research and

outlines proposed design and analytical methods. It should address the significance of the proposed program of research in epidemiology. 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 oral presentation to the committee for evaluation and approval of the prospectus.

Students are advised to meet with committee members to discuss their research plan prior to this meeting to increase the likelihood that the prospectus will be approved. Prospectus development is typically an iterative process involving several rounds of feedback from the committee; it is not uncommon to hold two or three committee meetings prior to the final approval meeting. Unanimous, written approval of the prospectus is required on the [Thesis/Dissertation Proposal Approval form](#) at a special meeting of the student's committee to evaluate the prospectus.

The Dissertation Prospectus Defense Meeting milestone may be completed before the comprehensive examinations, but should ideally be held within one year of comps.

### **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. The style of the thesis writing, tables, figures, and references are to be like articles in the epidemiology journals (e.g., American Journal of Epidemiology).

### **Dissertation Defense**

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

- a critical inquiry into the purposes, methods, and results of the investigation—not a mere recapitulation of the procedures followed
- 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 before the examination. The dissertation should be in the format required by the Graduate College and Department.

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 dissertation defense should be scheduled for at least three 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 oral final examination is due in the Graduate College office not later than 48 hours (about 2 days) 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 one time.

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 thesis deposit requirement.

### **Timeline**

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

- At least 2 weeks before the dissertation defense a copy of the dissertation will be delivered to committee members.
- At least 6 weeks before thesis deposit the student will do their presentation of their dissertation during seminar hour.
- At least 5 weeks before the thesis deposit the dissertation defense will be held
- At least 3 weeks before the thesis deposit the committee will receive the proposed final draft with tracked changes and a description of responses to the committee's questions and recommendations.
- Students are responsible for submitting the thesis to the Graduate College through the thesis submission process and are responsible for ensuring that the committee certifications are received by the Graduate College through electronic workflow. The rules/regulations for thesis submissions can be found in the [Graduate College Thesis and Dissertation Manual](#).

### **Submission Deadlines**

The thesis submission deadline, along with all other degree completion and graduation deadlines can be found on the [Academic Calendar](#) which is published by the Office of the Registrar.

### **Three-Manuscript Option**

In the Department of Epidemiology, a PhD dissertation may consist of at least 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 to obtain maximum publications. At the prospectus meeting the thesis committee must approve the three-paper option and determine a timeline and process for review of individual manuscripts and the final complete dissertation.

### **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. The style of the thesis writing, tables, figures, and references are to be like articles in the epidemiology journals (e.g., American Journal of Epidemiology). To satisfy the format, 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 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 involves submitting a written proposal (the prospectus) for discussion and approval at one or more proposal meetings with the dissertation committee. It may be desirable to have 2 such meetings with the goal of the first being to obtain concept approval for the scope of the papers and the second the full prospectus evaluation meeting 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. See previous Q and A.

*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 always modifications to design and methods that must be made based on discussions at the proposal meeting(s). Hence the advice to have a concept approval meeting early in the student’s PhD program.

*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 although it is often warranted due to committee member contributions to the development of the research and review and commenting on the written document. Paper authorship should be determined by usual authorship guidelines in the professional journals to which the papers are being submitted. Students should discuss authorship decisions with their committee chair.

*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. A nonquantitative research synthesis or a theoretical paper may be accepted, for example.

*Q: Where does my literature review go?*

A: If one of the manuscripts will be a systematic review or meta-analysis 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.