# Table of Contents

**STUDENT INFORMATION AND POLICIES**

- Department Description and Mission ........................................................................... 1
- Student Services and Resources ...................................................................................... 2
  - University Resources .................................................................................................. 2
- Departmental Responsibilities .......................................................................................... 4
- UI Expectations of Graduate Students .......................................................................... 4
- Departmental and University Policies ........................................................................... 5
- Advising .......................................................................................................................... 6
- Departmental Plan of Study ........................................................................................................ 7
- Graduate Student Dismissal Procedures ........................................................................... 8

**DEGREE PROGRAM INFORMATION AND REQUIREMENTS**

- MPH Degree – Occupational and Environmental Health .................................................. 10
  - Link to MPH Student Handbook ................................................................................. 10
- MS Degree – Occupational and Environmental Health ................................................... 12
- MS Degree – Industrial Hygiene concentration ................................................................ 14
- MS Degree – Agricultural Safety & Health concentration ............................................ 16
- PhD Degree – Occupational and Environmental Health ................................................ 18
  - Doctoral Student Academic Progress Expectations ...................................................... 20
- Departmental Course List .................................................................................................. 21

**MS POLICIES AND PROCEDURES**

- MS Examination Overview ............................................................................................ 22
- MS with Thesis Final Examination .................................................................................. 22
  - Instructions for Preparation of an MS Thesis ............................................................... 25
- MS with Internship Culminating Experience .................................................................. 26
  - Instructions for Preparation of an MS Internship Report ............................................ 28

**PHD POLICIES AND PROCEDURES**

- PhD Examinations Overview .......................................................................................... 29
  - Preliminary Assessment ............................................................................................... 29
  - Proposal Review ......................................................................................................... 31
- PhD Comprehensive Examination .................................................................................. 33
- PhD Final Examination .................................................................................................... 35
  - Instructions for Preparation of an PhD Dissertation ................................................ 38
STUDENT INFORMATION AND POLICIES

Department Description and Mission
The mission of the Department of Occupational and Environmental Health (OEH) is to prevent injury and illness resulting from occupational and environmental hazards. To accomplish this mission, we educate the next generation of public health leaders and conduct research that enables effective outreach and interventions for the citizens of Iowa, the United States, and the world.

Department Organization
OEH is one of 5 departments in the College of Public Health. The 4 other departments are: Biostatistics, Community and Behavioral Health, Epidemiology, and Health Management and Policy.

Research Centers
OEH is home to six research centers which are the cornerstones of research, educational and outreach activities for the department.

- Iowa’s Center for Agricultural Safety and Health (I-CASH)
- Environmental Health Sciences Research Center (EHSRC)
- Heartland Center for Occupational Health and Safety
- Great Plains Center for Agricultural Health (GPCAH)
- Injury Prevention Research Center (IPRC)
- Healthier Workforce Center of the Midwest

Departmental Contacts
Tom Peters, Interim DEO and Professor
thomas-m-peters@uiowa.edu

Patrick O'Shaughnessy, Professor and Director of Graduate Studies
patrick-oshaughnessy@uiowa.edu

Brianne Schwarz, Graduate Program Coordinator
brianne-schwarz@uiowa.edu

The University of Iowa prohibits discrimination in employment, educational programs, and activities on the basis of race, creed, color, religion, national origin, age, sex, pregnancy (including childbirth and related conditions), disability, genetic information, status as a U.S. veteran, service in the U.S. military, sexual orientation, gender identity, or associational preferences. The university also affirms its commitment to providing equal opportunities and equal access to university facilities. For additional information on nondiscrimination policies, contact the Director, Office of Institutional Equity, the University of Iowa, 202 Jessup Hall, 319-335-0705, oie-ui@uiowa.edu.
Student Services & Resources

OEH Office Space
A common room in the OEH suite (S332 CPHB) with four computers/ desks is open for OEH student use. No reservation is needed, but it is not intended that a desk with computer be utilized long-term by a student.

Limited desk space is also available in the OEH suite for PhD students and students working as graduate teaching or research assistants that is assigned on a semester basis. Priority is given to students who are in the PhD program conducting research (who do not have an office elsewhere on campus), graduate research assistants or teaching assistants. Space allocations are reviewed each semester by the Graduate Program Coordinator and Director of Graduate Studies and are renewed each August. However, designated space can be reassigned at any time as needed or if space is unused.

Computer Labs
The designated student computer lab is on the second floor of CPHB and is available for use at any time for all CPH students. The computer room in the OEH suite (S332) is also available for OEH students.

Information Technology Services
For assistance with IT services, please contact CPH Information Technology Services.

Email
Students will be connected to the College of Public Health network and added to the OEH student group email lists. University policy specifies that students are responsible for all official correspondences sent to their University of Iowa email address (@uiowa.edu). Students receive course information, seminar announcements, job announcements, and program information via uiowa.edu accounts. Announcements are not distributed to personal email accounts. It is important that students are checking email regularly and frequently so that they are kept aware of any important reminders, updates, deadlines, and opportunities.

University resources
Basic Needs & Support: Listings for campus and community resources that help support basic needs – including food insecurity, childcare, health and wellness, mental health.

- Phone: 319-335-1162
- Email: dos-assistance@uiowa.edu

CAMBUS: The CAMBUS is a free campus transportation system. Iowa City and Coralville also operate a bus system that serves the College of Public Health. All three have stops at the Medical Education and Research Facility (MERF) at 375 Newton Road. CAMBUS is no fare and available to the general public. Pick-up times and routes for all three transportation systems (Iowa City, Coralville, and CAMBUS) can be found by using the Transit App.

- For qualifying persons with a disability, CAMBUS provides a complimentary demand-response service called the Bionic Bus. Bionic Bus operates as a paratransit bus service meeting FTA and ADA regulations.
Family Services: Services include childcare subsidies and finals child care, campus lactation rooms, elder caregiving resources, and resources for veteran and military families.

- Phone: 319-335-3558
- Email: familyservices@uiowa.edu

Student Disability Services: Student Disability Services (SDS) provides support and academic accommodations for students with disabilities.

- Phone: 319-335-1462
- Email: sds-info@uiowa.edu

Writing Center: The Writing Center is a free resource offering weekly sessions, one-time sessions, and a document review service, which provides feedback in the form of written comments. Located at 110 English-Philosophy Building (EPB).

- Phone: 319-335-0188
- Email: writing-center@uiowa.edu

Confidential Resources

Office of the Ombudsperson: The Office of the Ombudsperson is a resource for any member of the university community -- including students, faculty, staff, postdocs, residents and fellows-- with a problem or concern. The Ombudsperson provides conflict resolution, mediation services, and advocacy for fair treatment and fair process. Services are confidential, neutral, and informal.

- Phone: 319-335-360
- Email: ombudsperson@uiowa.edu

Rape Victim Advocacy Program (RVAP): RVAP provides free, confidential, trauma-informed advocacy to people directly or indirectly impacted by sexual violence and promotes social change through prevention education.

- RVAP crisis line: 319-335-6000 or 800-228-1625
- Iowa City location: 108 River Street

University Counseling Center: The UCS offers a variety of counseling services for currently enrolled University of Iowa students, including group and individual therapy.

- Phone: 319-335-7294
- Email: ucs@uiowa.edu

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. Individual counseling services are available at WRAC during the fall and spring semesters. Counseling services are confidential, and offered at no cost, to UI students, employees, and the public.

- Phone: 319-335-1486
- Email: wrac@uiowa.edu
Departmental Responsibilities

It is the responsibility of every OEH student to:

• Have a complete Plan of Study listing required courses and electives needed to meet the Departmental degree requirements.

• Meet all degree requirements; including meeting all course requirements, thesis requirements, and meeting Graduate College deadlines for paperwork/forms needed for graduation (a detailed checklist with important deadlines is available from the Graduate Program Coordinator).

• Know the information in the Manual of Rules and Regulations of the Graduate College. The Manual can be found on the Graduate College website

• Check their Uliowa email messages frequently and as this is how departmental information will be communicated.

UI Expectations of Graduate Students

A graduate student has the primary responsibility for successful completion of their degree. A graduate student should be committed to their graduate education and should demonstrate this by efforts in the classroom and in research. A graduate student is expected to maintain a high level of professionalism, self-motivation, engagement, excellence, scholarly curiosity, and ethical standards. The following list of expectations was formulated by the Graduate College to enhance the successful degree completion of graduate students. They are meant to be followed in cooperation with, and promotion by, their advisor.

A Graduate Student:

• Should be knowledgeable of the policies and requirements of the Graduate College and the Department.

• Should comply with all institutional policies, including academic program milestones. The student should comply with both the letter and spirit of all best practices and policies of the Department and University.

• Shall attend the course Principles of Scholarly Integrity: Public Health (CPH:7270) and practice those guidelines in conducting thesis/dissertation research.

A Graduate Student engaged in thesis or dissertation research:

• Shall work with their advisor to develop a thesis/dissertation project. This will include establishing a timeline for each phase of the work. The student should strive to meet the established deadlines.

• Shall work with their advisor to select a thesis/dissertation committee, as applicable.

• Should meet regularly with the research advisor and the thesis/dissertation advisory committee members, and provide updates on the progress and results of ongoing research. The student should be responsive to the advice of and constructive criticism from the committee.

• Should discuss policies on authorship and attendance at professional meetings with their advisor. The student should work with the advisor to submit all relevant research results that are ready for publication in a timely manner prior to graduation.

• Should contribute to maintaining a research environment that is intellectually stimulating, emotionally supportive, safe, and free of harassment.

• Should discuss policies on work hours, sick leave and vacation with the advisor or graduate director. The student should consult with the advisor in advance of any planned absences.

• Should acknowledge primary responsibility to develop a career following the completion of the degree. The student should seek guidance from available resources, including the research advisor, career counseling services, thesis/dissertation committee, and any other mentors.
Departmental and University Policies

Graduate College Regulations
All Occupational and Environmental Health degrees are conferred through the Graduate College. Therefore, the Department adheres to the Graduate College rules, regulations, and requirements that are outlined in the Manual of Rules and Regulations of the Graduate College. The Manual can be found on the Graduate College website: http://www.grad.uiowa.edu/graduate-college-manual. Additional information about the Graduate College can be found at: http://www.grad.uiowa.edu

Grading System
With exceptions given below, departmental courses are graded with the use of a traditional letter-grade system ranging from A to F with plus and minus to designate gradations of performance between letter grades. A grading system of Satisfactory/Unsatisfactory (S/U) may only be used for courses offered by other departments, provided that the course instructor and the student’s advisor approve the registration. Neither the S nor the U is used in computing grade-point average. Approval for an S/U grade is accomplished by filing a form with appropriate signatures in the Registrar’s Office at the time of registration or no later than the last day of the third week of a semester or the third day of the second week of a summer session.

For courses offered by this department, an S/U grading system is mandatory for thesis/dissertation credits (OEH:7000). An option of obtaining a letter grade or S/U designation exists for independent study (OEH:7020) and preceptorship (OEH:7040). For all courses offered by other departments, the number of semester hours that can be taken under the S/U grading system is limited to 6 for MS students and 12 for PhD students. This rule applies to courses taken while the student is a regular, conditional, or professional improvement student.

Degree Advancement
Any student desiring to enter a PhD-level program within the department will need to be approved by faculty vote. This policy implies that currently enrolled master’s students who wish to advance to a doctoral degree without completing the master’s degree must provide application materials for a faculty vote before progressing to the status of doctoral candidate. This application process will be internal to the department but will require the same materials as needed for Graduate Admissions.

Registration
Course registration is accomplished through the University of Iowa MyUI registration system. In order to register, students must request that their faculty advisor grant them permission via the registration authorization function in MAUI. Each student should consult with a faculty advisor before registering.

A student may register for no more than 15 graduate hours per semester during fall and spring semester, or 8 hours during the summer session. Nine or more hours constitutes full-time student status.

Adding/Dropping Courses
Changes in registration must be initiated by the student. The end of the second week of classes is the deadline to add or drop courses without Dean’s approval. Students should be aware that withdrawing their entire registration will result in a successively increased percentage of the tuition fee assessment. More information, including significant deadlines for each semester as well as change of registration forms are located on the Registrar’s Office website.
**Student Rights**
General University policies associated with student rights at the University level are listed on the [Dean of Students website](#).

**Information on Academic Standing, Probation and Dismissal**
(Graduate College manual)

**The University of Iowa Academic Grievance Procedures**
(Graduate College manual)

**Policy on Sexual Harassment and Consensual Relationships**
(University of Iowa Operations Manual)

**Human Subject Research**
If you have a significant research role in a project that deals with human subjects, you will be required to take a short course on human subject research. Ask your advisor or the Graduate Program Coordinator for information on this.

**Disabilities**
If you have or suspect you may have a disability which could affect your potential to successfully complete your educational objectives, contact [Student Disability Services](#) to arrange for academic accommodations.

**Advising**
When an applicant is admitted to the Department of Occupational and Environmental Health, the student is assigned a faculty advisor and notified by the department. 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. Pending approval by the new advisor, the student must then notify the prior advisor, the Department Head, and the departmental Graduate Program Coordinator. It should be emphasized that the reason for change may be personal or because of the student’s interests, and that there is no requirement to remain with the same advisor throughout one’s academic career.

A master’s thesis or doctoral student is initially assigned a faculty advisor upon being admitted to the Department but establishes a research project towards a thesis or dissertation under the direction of possibly another faculty member. In that case, the thesis director will assume the responsibility of also being the student’s academic advisor.

In addition to the advisor, two other personnel within the department will provide advice and information when requested: the Director of Graduate Studies, Dr. Patrick O’Shaughnessy, and the Graduate Program Coordinator, Ms. Brianne Schwarz. Dr. O’Shaughnessy oversees all student-related issues within the department and is a good resource for information related to both departmental and Graduate College regulations. Ms. Schwarz maintains student files, ensures that all paperwork is completed, and can advise students on procedural issues related to obtaining their degrees.
Departmental Plan of Study

A Departmental Plan of Study must be completed in the first semester of the student’s program. The purpose of the plan is to list all the required and elective courses that the student will take to receive a degree. Additionally, the Plan of Study will also be used to ensure that any requested waivers or transfer credits are approved and meet Graduate College and Departmental requirements. The Departmental Plan of Study must be developed with the student’s advisor, signed by the student and advisor, and submitted (by the advisor) to the Graduate Program Coordinator for review. In some cases, the Plan of Study may go to the Departmental faculty for final approval. Changes in the Plan of Study must be made within five days of the semester of change, which then requires resubmission to the Graduate Program Coordinator by the advisor.

Transfer Credits

Courses taken from other colleges and universities are evaluated by the University of Iowa Graduate Admissions Office and a list is made of those which the Graduate College will allow to be transferred. Inclusion on this list does not automatically indicate that a course will be transferable as a course satisfying the requirements of one of our degree programs. However, the department can only approve transfer hours from courses already approved by Graduate Admissions. Students requesting transfer of credit hours from other institutions to be applied toward their degree must provide information about the course (institution, course title, number of credit hours and grade) and a course description sufficient to determine whether the course is applicable to their degree program.

Courses taken ten or more years prior to, a) the session in which the master's degree is to be conferred, or b) the doctoral comprehensive examination, cannot generally be used to fulfill degree requirements. If the department determines that courses older than 10 years may be used to fulfill graduation requirements, then a letter of petition must be sent to the Graduate College requesting the use of those credits.

The number of credit hours that can be transferred is related to the total number of hours required for your degree program and the “academic registration requirement” of this University. The academic registration requirement is defined as the minimum number of semester hours that must be obtained from courses administered by The University of Iowa in order to obtain a degree from this University.

**MS Degree:** To satisfy the academic registration requirement for the MS degree, at least 24 graduate semester hours must be completed under the auspices of the University of Iowa after admission to the department. This implies, for example, that a maximum of 14 semester hours of graduate-level coursework may be transferred to complete the 38 hours needed for an MS in OEH.

**PhD Degree:** To satisfy the academic registration requirement for the PhD degree, a student must earn at least 39 semester hours while registered in the University of Iowa Graduate College. After completing 21 semester hours, an additional 18 semester hours must be completed during which time a student must (1) be enrolled as a full-time student (9 semester hours minimum) in each of two semesters, or (2) be enrolled for a minimum of 6 semester hours in each of three semesters. This rule implies that a maximum of 33 semester hours can be transferred toward the 72 hours needed for a PhD degree. All courses to applied to the degree must be completed within 10 years of the graduation date.
Waiver of Courses
If a student has taken a graduate-level course equivalent to a required course, the student may request that the course be waived. A waiver means that the student is not required to enroll in the course; however, the equivalent number of credit hours must be taken to meet the total course degree requirements by enrolling in an elective course. To have a required course waived, the student must obtain a course waiver form from the Graduate Program Coordinator and present a syllabus of the course taken to the director of the course to be waived to determine whether the courses are equivalent.

Independent Study
Independent study credits may be earned only when arranged in advance and approval of the project has been given. Work is to be performed concurrent with registration. To obtain approval for an independent study (OEH:7020), a written agreement between the student and the faculty advisor will be made that specifies the outcome of the work, the number of semester hours to be applied, and the grading system to be used – S/U or letter grade. A form for this purpose is available from the Graduate Program Coordinator, and will be returned to the Coordinator after completion.

Graduate Student Dismissal Procedures

When a student is dismissed, they will be denied permission to reregister within any departmental program. A letter to the student will be written by the Department’s Director of Graduate Studies (DGS) that explains the reasons for dismissal. Reasons for dismissal and an appeal process are defined below.

Dismissal Due to Inadequate GPA
The department follows the Graduate College (GC) policy for dismissal due to an inadequate cumulative grade-point average (GPA) with no exceptions. This policy can be found in the Graduate College Handbook.
In brief, while pursuing a degree, MS degree students are expected to maintain a 2.75 or better cumulative GPA, and PhD degree students are expected to maintain a 3.00 or better cumulative GPA. A student with less than the minimum GPA after 9 or more semester hours of graded (A, B, C, D, F) graduate work will be placed on academic probation by the Graduate College. If, after completing 9 more semester hours of graded (A, B, C, D, F) graduate work, the student’s GPA remains below the minimum, the student will be dismissed; otherwise the student will be restored to good standing. A student on probation shall not be permitted to take comprehensive or final examinations leading to any degree or certificate, nor may the student receive any graduate degree or certificate. To avoid dismissal by a PhD student based on this rule, the student may request to be admitted into a departmental MS program to complete its requirements to obtain an MS degree. Acceptance into an MS program, in that case, will require a departmental faculty vote.

Dismissal Due to Poor Course Performance
In addition to following GC policies concerning a cumulative GPA, the department maintains a more stringent standard regarding course grades applied to a degree. Students with a transcript containing more than 6 semester hours of courses applied toward their degree with a grade of C+ or lower will not be allowed to graduate. If this requirement is exceeded, a student may elect to retake a course, or courses, in which a C+ or lower was obtained. A subsequent grade of B- or higher will negate the lower grade when evaluating this standard, but will not remove the first grade from a student’s transcript. Furthermore, the semester hours obtained from retaking a course will not count toward the total needed to complete the degree.
Dismissal Due to Failure of the PhD Comprehensive Examination
At least two unsatisfactory votes by the examining committee signify a failure of the PhD Comprehensive Examination. If a failure is ruled, the student may retake the exam one time, no sooner than 4 months after the examination and no later than 6 months. A second failure will result in dismissal. To avoid dismissal after a second failure, the student may request to be admitted into a departmental MS program to complete its requirements to obtain an MS degree. Acceptance into an MS program, in that case, will require a departmental faculty vote.

Dismissal Due to Failure of the Final PhD Examination or Final MS Examination (Thesis Defense)
For both the MS and PhD Final Examination two unsatisfactory votes will make the committee report unsatisfactory, which constitutes a failure of the examination. If a failure is ruled, the student may retake the exam one time, no sooner than the next session (fall, spring, or summer) and no later than one year. A second failure will result in dismissal.

Dismissal Due to Failure to Make Satisfactory Progress
An MS student who fails to complete the Final Examination within 10 years of the first semester of courses applied to the degree will be dismissed. A PhD student may be dismissed for failure to make reasonable progress toward completion of the degree. Information regarding sufficient academic progress towards a PhD degree and the consequences for failing to meet those expectations is provided in the section, “Doctoral Student Academic Progress Expectations” (p 43).

Dismissal Due to Unethical Behavior & Transgressions of the Iowa Code of Student Life
Unethical behavior may result in dismissal. Unethical behavior includes research misconduct such as the fabrication or falsification of data and plagiarism as defined by the US HHS Office of Research Integrity. Other behaviors or actions that may result in dismissal are described in the University of Iowa Code of Student Life. Students are advised to review the Code.
For any act of unethical behavior or transgression of the Iowa Code of Student Life, the department will follow the Graduate College policy for dismissal, given in Section IV.F of the Manual of Rules and Regulations of the Graduate College.
Egregious acts of research misconduct may also result in additional action by the University as stated in section 27.6, Ethics in Research, of the University's Operations Manual.

Appeal of Dismissal
If a student judges the dismissal decision to be improper, the student has the right to request a review. In that case, a committee will be formed consisting of three department faculty members not including the student’s advisor. The committee will review the materials that document the case against the student. The result of their deliberations will be submitted in a letter to the DGS and DEO stating their opinion as to whether there was sufficient cause to dismiss the student. If sufficient cause is not found, the student will be re-instated in good standing.

If the student believes that there was a procedural irregularity in the dismissal, the student has the right to request a review. In that case, the GC policy given in Section IV.G of the Manual of Rules and Regulations of the Graduate College will be followed. The policy mentions a formal grievance procedure, which can be reviewed here.
DEGREE PROGRAM INFORMATION AND REQUIREMENTS

MPH Degree in Occupational and Environmental Health
Objectives and Competencies

Objective
The MPH in Occupational and Environmental Health (OEH) focuses on understanding how to identify, prevent, and control environmental factors that can harm human health. The MPH in OEH curriculum addresses the interrelationship between human health and the environment, but also allows students to tailor coursework to their interests in Global Environmental Health, Rural Health & Safety, Injury and Violence Prevention, or Occupational Health.

MPH Student Handbook

Graduates of the MPH with a concentration in Occupational and Environmental Health will be able to:

1. Describe the principles of the practice of occupational medicine, industrial hygiene, occupational health nursing, ergonomics, and occupational health management.

2. Comprehend the use of statistical analyses to associate environmental and occupational health hazards with health outcomes.


4. Explain the current regulatory issues concerned with environmental and occupational health hazards.

5. Explain the association between contemporary human health issues and the biological, chemical and physical factors of the natural environment and occupational settings that adversely affect health.

6. Identify the sources, routes of entry, and effects of environmental toxicants.

7. Analyze, critically review, and communicate the environmental and occupational factors that affect health.
MPH Degree in Occupational and Environmental Health
Degree Requirements

MPH Core Courses (18 s.h.)
The following course work is required for all MPH students. Students are expected to earn ≥ B- (2.67) on each core course and must earn a ≥ B (3.0) cumulative grade point average on all core courses. When necessary, a student may repeat a course to achieve this standard.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
</table>
| 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.
| OEH:4240   | Global Environmental Health                       | 3 s.h.
| HMP:4000   | Introduction to the U.S. Healthcare System        | 3 s.h.

OEH Required Courses (4 s.h.)
The following two courses are required of all students pursuing the MPH in OEH:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
</table>
| OEH:5620   | Occupational Health                               | 3 s.h.
| OEH:5010   | Occupational and Environmental Health Seminar     | 1 s.h.* |

*MPH students take OEH seminar three times: twice for 0 s.h. and once for 1 s.h. If completing the MPH in a one-year course of study, the seminar will be taken two times: once for 0 s.h. and once for 1 s.h.

Practicum Requirement (3 s.h.)
The practicum experience, including a final written report and poster presentation, constitutes the final examination for the MPH.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPH:7200</td>
<td>MPH Capstone Experience</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>CPH:7500</td>
<td>MPH Applied Practice Experience**</td>
<td>2 s.h.</td>
</tr>
</tbody>
</table>

**Pre-Requisite to MPH Practicum: Students must complete all MPH core courses and the majority of other MPH coursework prior to registering for the Applied Practice Experience.

The remaining required credits consist of choosing three of the following six courses:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
</table>
| OEH:4260   | Global Water and Health                           | 3 s.h.
| OEH:4510   | Injury and Violence Prevention                    | 3 s.h.
| OEH:5410   | Occupational Safety                               | 3 s.h.
| OEH:6110   | Rural Health and Agricultural Medicine            | 3 s.h.
| OEH:6710   | Human Toxicology and Risk Assessment              | 3 s.h.

Elective Courses (8 s.h.)
Elective courses to obtain the total semester hours required for this degree can be chosen from any graduate-level course offered by a department in the College of Public Health. Courses offered by departments in other colleges on this campus can be taken with approval by the advisor.

Total Semester Hours Required for MPH Degree (Minimum) 42 s.h.
MS Degree in Occupational and Environmental Health
Objectives and Competencies

This program prepares graduate level students for professional careers in environmental and occupational health. OEH MS degrees can be tailored to students’ interests. Students work with their faculty advisor to design a plan of study with coursework on topics such as environmental health, environmental toxicology, ergonomics, and occupational injury prevention.

The degree requires a minimum of 38 semester hours and prepares students for career opportunities in local, state, or federal health agencies, in departments of industrial health and safety in commercial enterprises, and in academic institutions.

Graduates of the MS in Occupational & Environmental Health will be able to:

- Describe major environmental hazards that adversely affect human health.
- Summarize the general sources of exposure and mechanisms of harm associated with occupational and environmental hazards.
- Demonstrate the use of regulatory guidelines that seek to control occupational health and injury issues.
- Apply epidemiological principles used to assess associations between exposure to occupational health and injury hazards on health outcomes.
- Use computer software and statistical methods to test a hypothesis.
- Use intervention and evaluation theory to prevent occupational health and injury hazards.
MS Degree in Occupational and Environmental Health
Degree Requirements

Required Courses

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:4240</td>
<td>Global Environmental Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5620</td>
<td>Occupational Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>BIOS:4120</td>
<td>Introduction to Biostatistics</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5010</td>
<td>Occupational &amp; Environmental Health Seminar</td>
<td>1 s.h. *</td>
</tr>
<tr>
<td>EPID:4400</td>
<td>Epidemiology I: Principles</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>CPH:6100</td>
<td>Essentials of Public Health</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>CPH:7270</td>
<td>Principles of Scholarly Integrity: Public Health</td>
<td>1 s.h.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16 s.h.</td>
</tr>
</tbody>
</table>

*Enroll in OEH seminar three times: Twice for 0 s.h. and once for 1 s.h.

Take at least 6 s.h. among the following courses:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:4260</td>
<td>Global Water and Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:4310</td>
<td>Occupational Ergonomics: Principles</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:451</td>
<td>Injury and Violence Prevention</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5410</td>
<td>Occupational Safety</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6110</td>
<td>Rural Health and Agricultural Medicine</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6710</td>
<td>Human Toxicology and Risk Assessment</td>
<td>3 s.h.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 s.h.</td>
</tr>
</tbody>
</table>

Thesis
Completion and acceptance of a master’s thesis is required. A maximum of 6 semester hours will be allowed for thesis credit hours (OEH:7000). Additional thesis credit hours may be allowed for students who take more than 38 semester hours. For instructions on thesis content see the section: General Instructions for Preparation of a MS Thesis and PhD Dissertation, pages 15-16.

Electives
Elective courses must be chosen to fulfill the minimum MS degree requirement of 38 semester hours. Students and advisors should select courses most appropriate to the individual student’s professional goals.

Final Examination
The final examination will consist of a defense of the MS thesis. For instructions on the format of the Final Examination see page 18.

Total Semester Hours Required for MS Degree (Minimum): 38 s.h.
MS Degree in Industrial Hygiene
Objectives and Competencies

The Industrial Hygiene MS training program is accredited by the Applied Natural Sciences Accreditation Commission of ABET. The mission of this program is to train individuals to prevent occupational disease and injury in industrial, environmental, and occupational sectors through the practice of the art and science of industrial hygiene.

This mission is supported by Program Educational Objectives, which state that, within a few years of graduation, MS graduates are expected to:

- Work in the field of occupational and environmental health and safety
- Anticipate, recognize, evaluate, and control workplace hazards
- Accept responsibility for their work, practicing ethically, adhering to sound scientific principles, and transitioning to independence
- Engage with fellow professionals and professional organizations to champion continuous improvement of worker/community health and safety
- Seek continued professional education
- Become professionally certified through ABIH or other allied accredited professional certifications

These objectives are supported by Student Outcomes, which state that at the time of graduation MS students are expected to be able to:

1) Anticipate and recognize occupational and environmental hazards (i.e., physical, chemical, and biological agents, factors, and stressors) generated by or associated with defined sources, unit operations, and/or processes
2) Describe qualitative and quantitative aspects of generation of hazards
3) Apply scientific principles, instrumentation, and methods to adequately assess exposures to hazards
4) Organize and interpret exposure data using qualitative and quantitative methods in the context of physiological, epidemiological, and toxicological knowledge of the response of the human body to hazards.
5) Recommend and evaluate controls to reduce or eliminate hazards with regard to traditional hierarchy considerations
6) Understand applicable business, managerial, and leadership practices with emphasis on program and project management
7) Communicate effectively and appropriately to advocate for continuous improvement in worker health and safety to pertinent audiences, including workforce, management, the public, and professional peers
8) Interpret and apply applicable and emerging regulations, consensus standards, and best practices affecting occupational and environmental health
9) Demonstrate an understanding of the professional code of ethics
10) Understand the value and path to attain professional certification in industrial hygiene & allied fields
# MS Degree in Industrial Hygiene

## Degree Requirements

### Required Courses:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:6420</td>
<td>Methods in Exposure Science</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6440</td>
<td>Control of Occupational Hazards</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5620</td>
<td>Occupational Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6710</td>
<td>Human Toxicology and Risk Assessment</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>EPID:4400</td>
<td>Epidemiology I: Principles</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>BIOS:4120</td>
<td>Introduction to Biostatistics</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5010</td>
<td>Occupational &amp; Environmental Health Seminar</td>
<td>1 s.h. *</td>
</tr>
<tr>
<td>CPH:6100</td>
<td>Essentials of Public Health</td>
<td>2 s.h.</td>
</tr>
<tr>
<td>CPH:7270</td>
<td>Principles of Scholarly Integrity: Public Health</td>
<td>1 s.h.</td>
</tr>
</tbody>
</table>

**22 s.h.**

*Enroll in OEH seminar three times: Twice for 0 s.h. and once for 1 s.h.*

### Take at least 12 s.h. among the following:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:4240</td>
<td>Global Environmental Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:4310</td>
<td>Occupational Ergonomics: Principles</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:4510</td>
<td>Injury and Violence Prevention</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5410</td>
<td>Occupational Safety</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6431</td>
<td>Assessing Noise Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6432</td>
<td>Assessing Non-Ionizing Radiation Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6433</td>
<td>Assessing Ionizing Radiation Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6450</td>
<td>Aerosol Technology</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6520</td>
<td>Injury Epidemiology</td>
<td>3 s.h.</td>
</tr>
</tbody>
</table>

### One of these:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:7000</td>
<td>Thesis</td>
<td>6 s.h.</td>
</tr>
<tr>
<td>OEH:7050</td>
<td>Internship</td>
<td>3 s.h.</td>
</tr>
</tbody>
</table>

### Research options Requirements:

Completion of a research project and a thesis is required. A maximum of 6 semester hours will be allowed for thesis credit hours (enrollment in OEH:7000).

### Internship Option Requirements:

Completion of an internship and an internship report is required. A maximum of 3 s.h. will be allowed for internship credit hours (enrollment in OEH:7050). Students are required to complete a 150-hour (minimum) internship.

### Electives

Elective courses are chosen to fulfill the minimum MS degree requirement of 43 semester hours. Courses most appropriate to the individual student’s professional goals are selected with the advisor’s input.

**Total Semester Hours Required for MS Degree (Minimum) 43 s.h.**
The Agricultural Safety and Health MS program will provide graduate students with knowledge about the industry of agriculture and the related occupational and environmental exposures and risks. Students will gain the necessary skills for anticipation, diagnosis, exposure assessment, treatment and prevention of agricultural illnesses and injuries. Graduates of the program will be prepared for positions in education, health care, insurance and agribusinesses as agricultural safety and health specialists.

Graduates of the MS in Agricultural Safety & Health will be able to:

1) Describe the basic concepts of agricultural safety and health.
2) Explain appropriate research design and methodology related to the field of agricultural safety and health.
3) Communicate agricultural safety and health concepts both orally and in writing.
4) Interpret the significance of occupationally derived data relative to an exposure or health outcome.
5) Analyze agricultural safety and health intervention programs.
6) Design and implement a research project relative to peer-reviewed literature in agricultural safety and health.

### MS Degree in Agricultural Safety and Health
#### Degree Requirements

**Required Courses**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:6110</td>
<td>Rural Health and Agricultural Medicine</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6120</td>
<td>Topics in Agriculture and Rural Health</td>
<td>3 s.h.*</td>
</tr>
<tr>
<td>OEH:7040</td>
<td>Preceptorship in Occupational &amp; Environmental Health</td>
<td>1 s.h.**</td>
</tr>
<tr>
<td>OEH:4240</td>
<td>Global Environmental Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5620</td>
<td>Occupational Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5410</td>
<td>Occupational Safety</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6710</td>
<td>Human Toxicology and Risk Assessment</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>BIOS:4120</td>
<td>Introduction to Biostatistics</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5010</td>
<td>Occupational &amp; Environmental Health Seminar</td>
<td>1 s.h.***</td>
</tr>
<tr>
<td>EPID:4400</td>
<td>Epidemiology I: Principles</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>CPH:6100</td>
<td>Essentials of Public Health</td>
<td>2 s.h.</td>
</tr>
<tr>
<td>CPH:7270</td>
<td>Principles of Scholarly Integrity: Public Health</td>
<td>1 s.h.</td>
</tr>
</tbody>
</table>

29 s.h.

* Enroll in Topics in Ag Health seminar three times: 1 s.h. each time

** May be waived with advisor approval if the student’s prior experience or research provides contact with agricultural working environments

*** Enroll in OEH seminar three times: Twice for 0 s.h. and once for 1 s.h.
**Elective Credits**
Students must complete at least 9 s.h. of electives; it is recommended that students select elective courses from the list below and work with their advisor to identify appropriate areas of emphasis (e.g., industrial hygiene, injury prevention, environmental health, or communication).

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:6420</td>
<td>Methods in Exposure Science</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6431</td>
<td>Assessing Noise Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6432</td>
<td>Assessing Non-Ionizing Radiation Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6433</td>
<td>Assessing Ionizing Radiation Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6440</td>
<td>Control of Occupational Hazards</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:4310</td>
<td>Occupational Ergonomics: Principles</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:4510</td>
<td>Injury and Violence Prevention</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6520</td>
<td>Injury Epidemiology</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:4260</td>
<td>Global Water and Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6720</td>
<td>Advanced Toxicology</td>
<td>4 s.h.</td>
</tr>
<tr>
<td>CPH:4200</td>
<td>Agriculture, Food Systems &amp; Sustainability</td>
<td>3 s.h.</td>
</tr>
</tbody>
</table>

**Approved elective courses in other departments:**
(Additional courses may be considered with your advisor’s approval)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPID:6400</td>
<td>Epidemiology II: Advanced Methods</td>
<td>4 s.h.</td>
</tr>
<tr>
<td>EPID:5600</td>
<td>Intro to Epi Data Management &amp; Analysis</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>ISE:3400</td>
<td>Human Factors</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>CBH:4105</td>
<td>Intro to Health Promotion &amp; Disease Prevention</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>CBH:5305</td>
<td>Evaluation: Approaches and Applications</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>CBH:6220</td>
<td>Health Communication Campaigns</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>CBH:5235</td>
<td>Community-Based Participatory Research</td>
<td>3 s.h.</td>
</tr>
</tbody>
</table>

**Thesis**
Completion and acceptance of a master’s thesis is required. A maximum of 4 semester hours will be allowed for thesis credit hours (OEH:7000).

**Final Examination**
The final examination will consist of a defense of the MS thesis. For instructions on the format of the Final Examination see page 18.

**Total Semester Hours Required for MS Degree (Minimum) 42 s.h.**
PhD Degree in Occupational and Environmental Health
Objectives and Competencies

The PhD in Occupational and Environmental Health (OEH) is an advanced research degree that emphasizes depth of knowledge and original research skills. The PhD in OEH is designed to develop leaders in environmental and occupational health research and practice.

The PhD program is tailored to meet students’ research and professional interests. Students work with their faculty advisor to design a specialized curriculum of coursework and research projects in the following areas:

- Agricultural Safety and Health
- Environmental Health
- Environmental Toxicology
- Ergonomics
- Industrial Hygiene
- Occupational Injury Prevention

In addition to mastering the degree competencies for the MS in Occupational and Environmental Health, PhD students will be able to:

1. Develop a proposal for grant funding
2. Use appropriate analytic methods to interpret data relevant to the field of occupational and environmental health
3. Develop a plan to communicate research findings to various audiences
4. Design a research study in the field of occupational and environmental health
5. Evaluate the strengths and limitations of peer-reviewed studies in the field of occupational and environmental health
PhD in Occupational and Environmental Health
Degree Requirements

Required Courses:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:4240</td>
<td>Global Environmental Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5620</td>
<td>Occupational Health</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:5010</td>
<td>Occupational &amp; Environmental Health Seminar</td>
<td>1 s.h.*</td>
</tr>
<tr>
<td>BIOS:4120</td>
<td>Introduction to Biostatistics</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>EPID:4400</td>
<td>Epidemiology I: Principles</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6460</td>
<td>Quantitative Exposure Assessment OR</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6520</td>
<td>Injury Epidemiology</td>
<td></td>
</tr>
<tr>
<td>OEH:7060</td>
<td>Research Design in OEH</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:7070</td>
<td>Interpreting OEH Research</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>CPH:6100</td>
<td>Essentials of Public Health</td>
<td>2 s.h.</td>
</tr>
<tr>
<td>CPH:7270</td>
<td>Principles of Scholarly Integrity: Public Health</td>
<td>1 s.h.</td>
</tr>
</tbody>
</table>

*Enroll in OEH seminar three times: Twice for 0 s.h., once for 1 s.h. 25 s.h.

Take at least 9 semester hours of the following:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:6110</td>
<td>Rural Health and Agricultural Medicine</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6420</td>
<td>Methods in Exposure Science</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6431</td>
<td>Assessing Noise Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6432</td>
<td>Assessing Non-Ionizing Radiation Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6433</td>
<td>Assessing Ionizing Radiation Hazards</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>OEH:6440</td>
<td>Control of Occupational Hazards</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6450</td>
<td>Aerosol Technology</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6460</td>
<td>Quantitative Exposure Assessment**</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6520</td>
<td>Injury Epidemiology**</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6710</td>
<td>Human Toxicology and Risk Assessment</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>OEH:6720</td>
<td>Advanced Toxicology</td>
<td>4 s.h.</td>
</tr>
<tr>
<td>BIOS:5120</td>
<td>Regression and ANOVA in Health Sciences</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>BIOS:5130</td>
<td>Applied Categorical Data Analysis</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>BIOS:6310</td>
<td>Introductory Longitudinal Data Analysis</td>
<td>3 s.h.</td>
</tr>
<tr>
<td>EPID:6400</td>
<td>Epidemiology II: Advanced Methods</td>
<td>4 s.h.</td>
</tr>
<tr>
<td>STAT:6516</td>
<td>Design of Experiments</td>
<td>4 s.h.</td>
</tr>
</tbody>
</table>

**Can be taken to fulfill this requirement if not taken as part of the 25 s.h. of required courses

Elective Credits
A minimum of 18 additional credit hours must be acquired from attendance in non-research-related courses. These would include any courses offered in a classroom setting or the equivalent web-based course. Students and advisors should select courses most appropriate to the individual student's professional goals.

Research Credits
The remaining credits needed to achieve the 72 required for this degree may be acquired by enrolling in OEH:7000 - Thesis/Dissertation. Remaining credits may also be acquired by enrolling in OEH:7020 - Independent Study in Occupational and Environmental Health or by any combination of OEH:7000, OEH:7020, and additional class-based courses.

Dissertation
Completion and acceptance of a PhD dissertation is required. For instructions on dissertation content and the format of the conducting the PhD defense, see pages 15-18.

Total Semester Hours Required for PhD Degree (Minimum) 72 s.h.
**Doctoral Student Academic Progress Expectations**

**Reasonable progress**: To be in good standing, a doctoral student must satisfy all departmental and Graduate College requirements and deadlines and must make reasonable progress toward completion of the degree as judged by the student's advisor. A student who fails to make reasonable progress will not be considered in good standing and provides cause for dismissal.

To aid in assuring reasonable progress toward their degree, the student will develop and maintain two documents.

1. By the end of the student’s first semester, a Departmental Plan of Study will be completed by the student in consultation with the advisor. This document lists courses and research credit hours needed to satisfy degree requirements in the semesters they will be taken. The plan will also specify the semesters in which the Preliminary Assessment and Comprehensive Exam are to be taken. Departmental expectations for the number of semesters by which these requirements are to be completed are given in the Student Handbook (page 30 and 35). A signed copy of the Plan of Study is to be maintained by the advisor and the Graduate Program Coordinator.

2. The student will maintain a curriculum vitae (CV) that will be updated annually. The CV will provide a record of all accomplishments, including a list of courses taken, awards, presentations, grants, and service activities. It will also contain a paragraph explaining progress toward the degree, including research and writing associated with completion of the dissertation and any reasons for not meeting the deadlines established in the Plan of Study.

The student’s academic progress will be reviewed annually by the advisor and the Director of Graduate Studies. This assessment will utilize the student’s CV and will be based on the timely completion of:

A. courses applied to the degree,

B. the Preliminary Assessment, and Comprehensive Exam within the semesters specified in the Plan of Study,

C. research – including data collection, data analysis, and written summaries (thesis, journal papers) – associated with the degree, and

D. research associated with a graduate research assistantship (GRA) appointment, if applicable.

The advisor will summarize her/his assessment of progress in an email to the Director of Graduate Studies (DGS). If a student fails to meet expectations for reasonable progress, the DGS will inform the student of this fact in writing. The notification will specify the way(s) that the student is failing to meet the standards. The student will then be placed on probationary status for the following six months. The student, with guidance from the advisor, will develop a written plan and timeframe for meeting required expectations. This plan will be signed by both advisor and student. Copies of the plan will be kept by the student and advisor and sent to the DGS.

If by the end of the six-month probationary period the advisor believes the student has not satisfied expectations for reasonable progress, the student will be dismissed. The student will be notified of this fact in writing by the DGS with reasons for the action. If the student is advised by the DGS, the DEO will oversee all aspects of the dismissal including writing the letter of dismissal.

**Appeal of Dismissal Due to Failure to Meet Departmental Deadlines:**
If a student judges the dismissal decision to be improper, the student has a right to request a review.
# Departmental Course List

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Hour</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEH:4240</td>
<td>Global Environmental Health</td>
<td>Lehmler/O’Shaughnessy/Thorne</td>
<td>3</td>
<td>Fall, Spring (online)</td>
</tr>
<tr>
<td>OEH:4260</td>
<td>Global Water &amp; Health</td>
<td>Baker</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>OEH:4310</td>
<td>Occupational Ergonomics: Principles</td>
<td>Fethke</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>OEH:4510</td>
<td>Injury and Violence Prevention</td>
<td>Harland</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>OEH:4530</td>
<td>Global Road Safety</td>
<td>Hamann</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>OEH:5010</td>
<td>Occ &amp; Env Health Seminar</td>
<td>Mikulski</td>
<td>0, 1</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>OEH:5410</td>
<td>Occupational Safety</td>
<td>Anthony</td>
<td>3</td>
<td>Spring, even</td>
</tr>
<tr>
<td>OEH:5620</td>
<td>Occupational Health</td>
<td>Casteel</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>OEH:6110</td>
<td>Rural Health and Agricultural Medicine</td>
<td>Rohlman</td>
<td>3</td>
<td>Spring, Summer</td>
</tr>
<tr>
<td>OEH:6120</td>
<td>Topics in Agricultural &amp; Rural Health</td>
<td>Rohlman/Janssen</td>
<td>1</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>OEH:6420</td>
<td>Methods in Exposure Science</td>
<td>Nonnenmann</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>OEH:6431</td>
<td>Assessing Noise Hazards</td>
<td>Nonnenmann</td>
<td>1</td>
<td>Spring, odd</td>
</tr>
<tr>
<td>OEH:6432</td>
<td>Assessing Non-Ionizing Radiation</td>
<td>Nonnenmann</td>
<td>1</td>
<td>Spring, odd</td>
</tr>
<tr>
<td>OEH:6433</td>
<td>Assessing Ionizing Radiation Hazards</td>
<td>Nonnenmann</td>
<td>1</td>
<td>Spring, odd</td>
</tr>
<tr>
<td>OEH:6440</td>
<td>Control of Occupational Hazards</td>
<td>Peters/Nonnenmann</td>
<td>3</td>
<td>Spring, even</td>
</tr>
<tr>
<td>OEH:6450</td>
<td>Aerosol Technology</td>
<td>Peters</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>OEH:6460</td>
<td>Quantitative Exposure Assessment</td>
<td>Anthony/Peters/Fethke</td>
<td>1, 3</td>
<td>Fall</td>
</tr>
<tr>
<td>OEH:6520</td>
<td>Injury Epidemiology</td>
<td>Casteel</td>
<td>3</td>
<td>Spring, odd</td>
</tr>
<tr>
<td>OEH:6710</td>
<td>Human Toxicology and Risk Assessment</td>
<td>Kim/Lehmler/Ludewig/Thorne</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>OEH:6720</td>
<td>Advanced Toxicology</td>
<td>Ludewig/Lehmler</td>
<td>4</td>
<td>Fall, even</td>
</tr>
<tr>
<td>OEH:7000</td>
<td>Thesis/Dissertation</td>
<td>Faculty</td>
<td>arr.</td>
<td></td>
</tr>
<tr>
<td>OEH:7010</td>
<td>Problems in OEH</td>
<td>Faculty</td>
<td>arr.</td>
<td></td>
</tr>
<tr>
<td>OEH:7020</td>
<td>Independent Study in OEH</td>
<td>Faculty</td>
<td>arr.</td>
<td></td>
</tr>
<tr>
<td>OEH:7040</td>
<td>Preceptorship in OEH</td>
<td>Faculty</td>
<td>arr.</td>
<td></td>
</tr>
<tr>
<td>OEH:7050</td>
<td>OEH Internship</td>
<td>Faculty (Peters)</td>
<td>0/3</td>
<td>Spring</td>
</tr>
<tr>
<td>OEH:7060</td>
<td>Research Design in OEH</td>
<td>Casteel</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>OEH:7070</td>
<td>Interpreting OEH Research</td>
<td>Fethke</td>
<td>3</td>
<td>Spring</td>
</tr>
</tbody>
</table>
MS POLICIES AND PROCEDURES

MS Examination Overview

This section of the handbook combines all aspects of the examination policies and procedures associated with obtaining an MS from this department. These policies and procedures apply to degrees in OEH, ASH and IH. The information given here combines guidelines mandated by the Graduate College and those specific to this department. The student should refer to the Manual of Rules and Regulations of the Graduate College for specific guidelines associated with these examinations, and the Graduate College Thesis Manual for guidelines associated with the preparation of a thesis or dissertation.

MS with Thesis Final Examination

For the MS in Occupational & Environmental Health, Industrial Hygiene and Agricultural Safety & Health, the Final Examination consists of the Thesis Defense, an oral examination of the thesis research. A committee will thoroughly examine the student’s area of knowledge associated with the context of the work. The Master’s thesis must be directed by an Occupational and Environmental Health faculty member. The master’s thesis must be of a scholarly quality with evidence of original thinking. This may or may not include data collection as determined by the student’s thesis committee. The expectation is that the thesis content is of a quality that would result in publication in a peer-reviewed scientific journal.

Time Consideration

A single, final deposit date for each semester is set by the Graduate College. See the Graduate College website for the date associated with the semester you plan to obtain the degree. The deposited thesis occurs after the defense and after any additional changes required by the committee. At deposit, the thesis needs to include all required elements, finalized content, and must be properly formatted. To allow time to make final changes, the defense should take place no later than 10-14 days prior to the deposit date. Furthermore, the written thesis must be distributed to the committee members at least two weeks prior to the thesis defense. Finally, the advisor should have up to two weeks to review and comment on a final draft by the student prior to submission to the committee. Therefore, the student should provide a defensible draft to their advisor at least 6 weeks prior to the deposit date – this is usually within the spring break time period when defending in the spring semester.

Committee

The thesis committee shall consist of at least three members of the graduate faculty (tenure track faculty) as recommended by the student and approved by the student's academic advisor; of the three, these members shall include the student’s advisor and at least one other member from this department (Manual of Rules and Regulations of the Graduate College, Section X.K).

Format

Instructions for preparing a thesis to satisfy requirements set by this Department and the Graduate College are described in the next section, “Instructions for Preparation of an MS Thesis”. MS Theses written by students of this department can be consulted as formatting examples. They are available from the OEH front office or by accessing an OEH thesis (given a known author) through the UI electronic thesis depository at UI electronic thesis depository.
Process
An announcement giving the thesis title; student name; date, place, and time of defense; and brief abstract is emailed to all OEH faculty, staff, and students two weeks prior to the defense date. Contact the Graduate Student Coordinator for help with this announcement.

If an audience is present in addition to the student’s committee members, the defense will consist of the following format:

- The chairperson (the advisor) introduces the student and explains the format that will be followed to the audience.
  - May include asking the student to give a brief history of their academic/work history (what brought you to this point?).

- The student then gives a summary overview of the objectives and important findings associated with their work.
  - Limit time to 20-30 minutes.
  - Talk should be addressed more towards the audience than committee members who have already read the thesis/dissertation.

- The question-and-answer period then follows where, initially, the audience is allowed to ask questions. Following audience questions, the audience is asked to leave and the committee members only will ask any additional questions. These questions are typically related to the content of the thesis and associated slides of the presentation. At the discretion of the committee, the student may also be examined on the broader professional and scientific issues associated with his/her scholastic focus area.

- Upon completion of the question-and-answer period, the committee members will convene a closed-door session to discuss the student’s performance during the oral presentation of thesis research. The committee will then also discuss the content of the thesis to determine whether (a) it satisfies the expected level of content and rigor in each of the three chapters, and (b) whether edits and/or additional material is required prior to acceptance. The student is informed of the result of the committee’s decision.

- The student is called back into the conference room and informed of the result of the committee’s decisions.

Outcomes
There are two outcomes associated with a thesis defense. The oral performance and the overall condition of the thesis will be designated as “satisfactory” or “unsatisfactory” by vote of the committee. Two unsatisfactory votes will make the committee report unsatisfactory, which constitutes a failure of the examination. If a failure is ruled, the student may retake the exam one time, no sooner than the next session (fall, spring, or summer) and no later than one year. A second failure will result in dismissal.

If less than two votes are “unsatisfactory”, the committee will then determine the acceptability of the contents of the student’s thesis. Generally, some changes to the thesis are requested by at least one committee member. The changes may be to reorganize a section, clarify a statement, or include additional information such as the inclusion of a figure or table. The student will then make the required changes and seek approval of them by the requesting committee member prior to making the deposit of the thesis. The official vote of acceptance of the thesis by the committee member is made in an online form generated by the Graduate College after the student has deposited the thesis via the ProQuest portal. During that process, a PDF of the thesis will be available for the committee member to view to be sure that the deposited thesis contains any requested changes.
Responsibilities

It is the student’s responsibility to ensure that all work is performed in a timely manner to obtain the degree. The forms and timelines originate from the Graduate College, which ultimately confers the degree, not the department. A detailed checklist of duties and responsibilities required for obtaining a degree is available from the Graduate Program Coordinator (GPC).

Student
- Notifies Graduate Program Coordinator (GPC) of intent to defend and works with GPC to satisfy all Graduate College requirements
- Sends requests to potential committee members
- Schedules defense date with advisor and committee members
- Completes thesis with sufficient time for review by advisor
- Sends printed copy or PDF of thesis to advisor and committee members two weeks prior to defense
- Satisfies all departmental requirements as given in the Detailed Checklist
- Submits thesis to ProQuest portal before the Graduate College deadline
- Provides an electronic (PDF) copy of the accepted thesis to the OEH secretary for departmental records

Student and Advisor
- Selects committee members
- Determines potential defense date
- Reviews/edits student’s thesis prior to submission to committee members

Advisor
- Advises student on thesis content
- Chairs thesis defense
- Signs required forms

Graduate Program Coordinator
- Supplies a detailed checklist, needed forms and advice when asked by student
- Distributes announcement of thesis defense
Instructions for Preparation of an MS Thesis

In the Department of Occupational and Environmental Health, a Master's thesis will generally consist of at least one manuscript that the Thesis Committee deems suitable for publication. The scope of the work entailed in the manuscript should be negotiated in advance with the Thesis Committee.

Thesis Composition

- The thesis will contain three sections:
  - an introductory chapter,
  - a chapter containing the body of a publishable manuscript,
  - a concluding chapter.

- The introductory chapter will:
  - outline the larger problems addressed in the research,
  - discuss the purpose and major goals of the research, and (if requested)
  - contain a comprehensive literature review of the research area.

- The concluding chapter will:
  - show how the manuscripts shine light on the larger problems mentioned in the introduction,
  - address the significance of the research to the field(s) of Occupational and/or Environmental Health,
  - mention any aspect(s) of the research not included in the manuscripts but worthy of discussion, and
  - discuss the potential for future research.

Formatting Guidelines

- In general, follow formatting recommendations by the University of Iowa Graduate College for preparing an MS thesis when preparing the thesis or dissertation.

- In order to satisfy the format-check procedure of the Graduate College, the thesis must appear in all ways as a typical thesis or dissertation. For example:
  - The chapter that contains a manuscript must be formatted as if it were a chapter in a typical thesis.
  - The chapters must each contain a title and be numbered consecutively.
  - The format of subheadings must be consistent from chapter to chapter.

- Graphs and tables must be numbered in association with the chapter they are associated with (e.g. Figure 1.1 and 1.2 in Chapter 1 followed by Figure 2.1 and 2.2 in Chapter 2). They must also agree with the numbers given in the List of Figures and List of Tables.

- The same referencing style must be used throughout the thesis or dissertation regardless of whether the articles are submitted to different journals with different referencing styles.

- Given the comments above, some reformatting of a manuscript is expected prior to submission to the publisher of a peer-reviewed journal if submitted for publication.
MS With Internship Culminating Experience

A student choosing the internship option of the Industrial Hygiene master’s degree must enroll in OEH:7050 – OEH Internship during two consecutive spring semesters. The student must also attend a meeting during each previous fall semester that discusses the internship process. The culminating experience of the internship option consists of the Internship Presentation and written Internship Report, which are required for successful completion of OEH:7050. As part of the graduation requirements of students pursuing the MS in Industrial Hygiene internship option, a satisfactory grade in OEH:7050 must be obtained.

The Internship Presentation and Internship Report describe the internship site; its organizational structure (departments, production); health, safety, environmental systems relevant to the internship; and a detailed description of the self-directed internship project. Additional instructions are given in the section, “Instructions for Preparation of an MS Internship Report”. The Internship Report will be reviewed by a committee to thoroughly examine the student’s area of knowledge associated with the context of the work. The Internship Report must be directed by a faculty in OEH but not necessarily the student’s academic advisor.

Time Considerations
The student must complete an agreement with their internship advisor and EHS representative at the internship site by the end of their first spring semester. Students should complete their internship before the spring semester of the student’s second year. The Internship Report should be provided to the advisor by the beginning of spring break. The student must submit the revised Internship Report to their committee a minimum of two weeks prior to the scheduled presentation.

The final report must be submitted to the committee and the instructor of OEH:7050 by the thesis deposit date for the University.

Committee
At a minimum, the internship committee shall consist of at least two members. One member shall include the OEH faculty internship advisor who directs the Internship Report. A second member may be the EHS representative from the internship site or another graduate faculty at the University. The committee should have expertise in the work that was performed for the internship project.

Process
The student will work with the Graduate Program Coordinator to prepare an announcement of the presentation that will be given to all OEH faculty, staff, and students at least two weeks prior to the Internship Presentation scheduled event. It will include: the Internship Report’s title; student name; date, place, and time of presentation; and a brief abstract. Attendance will be open to the public.

The presentation will consist of the following format.

- The OEH internship advisor introduces the student presenting.
- The student then provides a 15-minute presentation that covers the major aspects of the Internship Report, including the following:
  - Where and when the internship occurred, with acknowledgement of the intern supervisor
  - A brief description of the workplace – number of employees, shift, product made, EHS structure
  - Summary of the project performed, to include: risk, objectives, product(s) developed, feedback from the internship supervisor
Specific examples to demonstrate achieving departmental competencies and/or student outcomes relevant to the field of study

Lessons learned from the experience and reflection of what EHS skills you developed with this internship, pointing to the most significant departmental competencies and/or student outcomes relevant to the field of study

Note: elements of the report and presentation may be redacted or otherwise rendered non-identifiable in cases where confidentiality is needed.

- The audience asks questions for up to 5 minutes, with questions preferentially coming from faculty, staff and students with whom the student has not worked with in OEH:7050.

Outcomes

The internship advisor will determine the acceptability of the student’s written Internship Report. Acceptability will be defined as having adequately addressed all comments on the Internship Report from the committee. The advisor will report the results (satisfactory or unsatisfactory) to the director of OEH:7050 by the final examination week.

In addition to a satisfactory Internship Report, PDF versions of the Internship Presentation and the Internship Report must be uploaded to the drop box on the ICON site for OEH:7050 to receive a “satisfactory” grade in OEH:7050.

Responsibilities

Student

- Notifies the Graduate Program Coordinator of intent to graduate during final semester.
- Enrolls in OEH:7050 to develop internship plan and to secure agreements from the EHS supervisor at the internship site and by your academic advisor.
- Identifies Internship Advisor based on the internship goals and site selected.
- Sends requests to potential committee member(s).
- Completes Internship Report with sufficient time for review as defined by advisor.
- Emails copies of Internship Report in MS Word format to advisor and committee member(s) at least two weeks prior to the Internship Presentation.
- Obtains committee signatures on report signature page.
- **NOTE:** The Internship Report is not publicly available and is not sent to the Graduate College. It is available for future students to review for content/style and for program accreditation, only. Should the EHS personnel at the internship site require anonymity, information on the company and any employee names must be redacted by the student.

Student and Internship Advisor

- Selects committee members.
- Review/edit student’s report prior to submission to committee members.

Internship Advisor

- Negotiates with student and internship EHS personnel regarding suitable project.
- Provides feedback on Internship Report in a timely fashion.
- Attends oral defense presentation of Internship Report.
- Provides feedback and coordinates that of committee, recording pass/fail recommendation.
- Provides feedback to student and OEH:7050 primary faculty.

Graduate Program Coordinator

- Distributes announcement of Internship Presentation.
Instructions for Preparation of an MS Internship Report

In the Department of Occupational and Environmental Health, a Master’s Internship Report consists of three chapters, with the central chapter providing a detailed description of the key project that was completed during the internship. The scope of the work for this report is agreed to by the student, advisor, and the EHS representative at the internship site.

Report Composition

The master’s Internship Report must refer to the significance of the health/safety/environmental hazard being addressed and must contain site-specific materials or analysis relevant to the proposed project agreed upon between the student, the advisor, and the EHS representative at the internship site. The structure of the report of the report is as follows:

Introductory Chapter: Description of the Worksite and Hazard Review
- Summarize the personnel, EHS structure, and what is produced
- Summarize the overall manufacturing process (what comes in, what goes out), using terminology understood by the host site and translated to ensure the general public understands the process
  NOTE: You will want someone at your host site to review this
- Summarize the key hazards / risks that are associated with this internship site (this requires a literature search)
- Summarize the hazards that pose a major concern to your EHS personnel
  NOTE: This should feed into justification of why you have chosen the project you will report in the next chapter

Middle Chapter: Description of your Project
- Introduction: Justify the need for the project you worked on (use literature and include regulatory or consensus standards or new health/risk information to justify the need).
- Methods: What did you do and how did you do it
- Results: What did you generate/find/decide
- Discussion: Consider how your project might impact those at your internship site; will it stand up to time or is more needed; what should be done next?
- Recommendations / Conclusion: pick whichever is most appropriate to end this chapter

Final Chapter: What Was Learned from the Internship
- Discuss your opinions on the significance of your project to EHS at your internship site
- Identify and discuss key competencies (programmatic) that you developed during this project, giving specific examples of each of these
- Identify anything you would change about the way you completed your project, knowing now what you did not know at the time
- Identify recommendations for future actions at the internship site
- Provide any other pertinent self-reflection on the project you are willing to share

Formatting Guidelines

In general, follow formatting recommendations by the University of Iowa Graduate College for preparing an MS thesis when preparing the Internship Report.

For example:
- The chapters must each contain a title and be numbered consecutively.
- The format of subheadings must be consistent from chapter to chapter.
- Figures and tables must be numbered in association with the chapter they are associated with (e.g., Figure 1.1 and 1.2 in Chapter 1 followed by Figure 2.1 and 2.2 in Chapter 2). They must also agree with the numbers given in the List of Figures and List of Tables (both in the front).
- The same referencing style must be used throughout the document.
PHD POLICIES AND PROCEDURES

This section of the handbook combines all aspects of the examination policies and procedures associated with obtaining a PhD degree from this department. The information given here combines guidelines mandated by the Graduate College and those specific to this department. The student should refer to the Manual of Rules and Regulations of the Graduate College for specific guidelines associated with these examinations, and the Graduate College Thesis Manual for guidelines associated with the preparation of a thesis or dissertation.

PhD Examinations Overview

The examination process associated with obtaining a PhD is rigorous and consists of four distinct processes as outlined below.

- **Preliminary Assessment**: The Preliminary Assessment serves as a screening procedure to identify deficiencies that need to be corrected before formal course work is completed and to apprise potential committee members of research ideas of interest to the student.
- **Proposal Review**: Formal committee approval of a student’s PhD research is needed prior to the dissertation defense. The committee will evaluate a written proposal and oral explanation of the research that will make up the body of the PhD dissertation.
- **PhD Comprehensive Examination**: The PhD comprehensive examination is a requirement for all PhD candidates. It is taken at or near the end of formal course work and must be passed prior to the session of graduation. The examination will consist of both a written and an oral section. The student’s examination committee will determine the final grade – either satisfactory, reservations, or unsatisfactory.
- **PhD Final Examination**: The Final Examination consists of an oral defense of the student’s dissertation. It includes a critical inquiry into the purposes, methods, and results of the student’s investigations as well as an intensive questioning on areas of knowledge constituting the immediate context of the work. The student’s examination committee will report either a satisfactory or an unsatisfactory grade to the Graduate College.

Preliminary Assessment

Early in the student’s academic progress towards a PhD degree an assessment of their academic proficiency and research interests will be conducted. The Preliminary Assessment (Prelim) has a two-fold purpose: (1) identify deficiencies in the student’s academic preparation that need to be corrected early in the student’s program, and (2) discuss research ideas of interest to the student. As such, this process does not constitute an examination resulting in a grade, or pass/fail status, but is rather an opportunity to direct the student regarding their academic progress and to provide a preliminary assessment of their academic status and research interests.

The Graduate College does not require a Prelim, therefore there are no official forms required. However, the Graduate Program Coordinator must be informed of the occurrence of a Prelim and receive a copy of the summary letter (see below) for inclusion in the student’s academic file.

Time Consideration

The Prelim must be completed before the end of the student’s 3rd semester of study. If during the 3rd semester a research proposal by the student is ready to defend, at the discretion of the PhD Committee the Preliminary Assessment may be waived and replaced with the Proposal Review.

Committee

The Prelim Committee will be selected jointly by the student and advisor and will consist of at least three members of the Graduate Faculty of which at least two are from this Department.
Format
The student will prepare an oral presentation that describes any research to date and a summary of ideas that could lead to an acceptable dissertation as described in the section entitled “Instructions for Preparation of a PhD Dissertation” on page 34.

Process
The Prelim will consist of a meeting of the student and the Committee. One week prior to the meeting, the student will provide the Committee members with the following items.

- A copy of their transcript and Plan of Study.
- The PhD CV containing educational background, relevant work history, published works, conference abstracts, association memberships, awards, and other relevant information.
- An example of written material such as the introductory chapter of an MS thesis, the manuscript of a journal article or conference proceedings, or a literature review of a subject of interest to the student.

During the meeting, the Committee will review the material provided by the student and listen to the student’s presentation. The ensuing discussion will include an analysis of the student’s education and work history relative to the proposed research. The student’s written and oral communication skills will also be assessed.

Outcomes
A result of this analysis will be to provide suggestions that may include enhancing the student’s knowledge through additional coursework and/or increasing computer and laboratory/sampling skills as well as knowledge of specific statistical analysis methods. A summary of this assessment will be written by the advisor and provided to the student, the other committee members, and the Graduate Program Coordinator within one week of the meeting.

Responsibilities
The following actions are required as part of this assessment:

Student
- Initiates action by communicating to the advisor and Graduate Program Coordinator of their intentions to organize the assessment
- Sends requests to potential committee members
- Schedules meeting date and time with advisor and committee members
- Prints and sends copies of the transcript, Departmental Plan of Study, resume, and example of written material to the advisor and committee members at least 1 week prior to the assessment meeting
- Prepares a presentation of research ideas

Student and Advisor
- Select Prelim Committee members

Advisor
- Provides student with recent transcript and the Departmental Plan of Study
- Chairs the meeting
- Writes summary letter within one week after assessment and provides a copy to the student, committee members, and the Graduate Program Coordinator.
Proposal Review

The student’s dissertation proposal must be formally accepted at least one semester prior to the semester of the student’s Final Examination. It is advised that the Proposal Review be completed as soon as the plan for the dissertation research has been finalized between the student and advisor. An analysis of the dissertation proposal will be conducted by a committee that must consist of those individuals who will also make up the Final Examination Committee. The make-up of that Committee is dictated by the Graduate College as follows:

Committee

The committee established for the Proposal Review must be identical to the committee established for the Comprehensive Examination and for the Final Examination. Those committees consist of no fewer than four members of the Graduate Faculty appointed by the dean upon recommendation of the major department or program. These committees are composed as follows:

- At least three of the faculty members must be members of the University of Iowa tenure-track faculty.
- At least two of the faculty members are from the major department (defined as faculty members who hold any appointment in the major department or program), and are members of the University of Iowa tenure-track faculty.

The department may request the dean’s permission to replace one of the four members of the Graduate Faculty by a recognized scholar of professorial rank from another academic institution. Also, a voting member may be added at the discretion of the Graduate College Dean. (Manual of Rules and Regulations of the Graduate College, Section XII-P)

Format

The proposal must be written to satisfy the requirements established for dissertations in this department as described in section “Instructions for Preparation of a PhD Dissertation”. The proposal format will be that of an NIH-style R01 grant consisting of Specific Aims and a Research Strategy. A description of this grant type is given in the NIH document, “Research Instructions for NIH and Other PHS Agencies,” found here: Instructions Link. A description of the contents of an R01 grant is given in that document in Section R.400 (pages R-83 to R-95).

The proposal will begin with a title page that includes the intended title of the dissertation, the student’s name, the date of the review, and a list of the committee members. The body of the proposal will include one page for the Specific Aims section, and a maximum of 12 pages for the Research Strategy that contains sections discussing the research Significance, Innovation, and Approach. The Approach section will include a detailed description of your dissertation research methods. The research may be separated into three or more primary aims that coincide with the three or more journal articles that will result from the dissertation. Additional pages can be added to include a timeline of activities to complete the research and references of cited literature.
Process
The proposal review process will involve a meeting of the student and committee members. The printed proposal must be provided to the committee members at least two weeks prior to the meeting date. During the meeting, the student will give an oral presentation of the intended research followed by a discussion of the written research proposal.

During or soon after the Proposal Review, the student and advisor will determine who will be listed as co-authors of those dissertation chapters that will result in a manuscript for submission to a journal (typically chapters 2-4). A list of these manuscripts and associated authors will then be sent to all committee members. All committee members must be notified prior to the submission of a manuscript that will ultimately comprise a chapter in the dissertation, and be given an opportunity to review that manuscript before submission.

Outcomes
The proposal will be judged on the quality of the writing, the validity of the research methodology, and the potential to yield publishable findings. Unanimous, written approval of the proposal is required. A form for this purpose is available from the Graduate Program Coordinator.

Responsibilities
The following actions are required as part of the proposal review process:

Student
- Initiates action by communicating to the advisor and Graduate Program Coordinator of their intentions of organizing the review process
- Sends requests to potential committee members
- Schedules meeting date and time with advisor and committee members
- Prints and sends copies of the proposal to advisor and committee members at least 2 weeks prior to the review meeting
- Prepares a presentation outlining the proposed research
- Brings acceptance sheet to the meeting
- Returns a copy of the acceptance sheet to the Graduate Program Coordinator

Student and Advisor
- Selects committee members

Advisor
- Chairs the meeting

Graduate Program Coordinator
- Supplies copy of the acceptance sheet to the student
PhD Comprehensive Examination

The PhD Comprehensive Examination, administered only on campus, is intended to be an inclusive evaluation of the candidate’s mastery of their field of study. This examination is required of all PhD candidates by the Graduate College. As such, in addition to the information given below, the student is advised to see Section XII-K of the Manual of Rules and Regulations of the Graduate College.

Time Consideration

This examination must be taken before the end of the 5th semester of study. Furthermore, the Graduate College requires that this examination cannot occur within the same semester or session in which the dissertation defense is held.

Committee

The examination committee will consist of at least four members of the graduate faculty as previously explained in the “Proposal Review” section. The academic advisor is expected to participate with the student in the selection of the committee members. It is advisable, but not necessary, that the same members comprise the Comprehensive Examination and Final Examination Committees.

Process and Scheduling

The examination will consist of both a written and oral component. The student will take a five-hour (maximum) written examination consisting of questions prepared by the Committee. At most two weeks later, the student will sit for an oral examination of approximately 90-120 minutes.

At least two weeks prior to the written component, a set of six journal articles selected by the committee will be provided to the student by the advisor for review. These articles will reflect topics related to the student’s research and professional goals. These questions will be written to test the student’s ability to integrate and synthesize important facts and concepts of the occupational and/or environmental health disciplines through critical analysis of the selected articles. The examination will also include questions covering the principles and concepts covered in the core courses and relevant elective courses. The examination may also include questions to determine the level of professional competency in the student’s specialty area. Examples of generic questions given in the past include:

- What is the toxicologic pathway of which the chemical (or agent of interest) creates or can create an adverse health effect?
- Were the sample collection and analysis methods used in the paper appropriate in terms of their precision, sensitivity, and specificity? What alternatives might improve the study?
- What control technologies or prevention strategies are applicable to the hazard investigated? What are some of their limitations or alternatives?

The student will coordinate the scheduling of the exam components with Brianne Schwarz (S365 CPHB). Ms. Schwarz must be informed of the desire to sit for the Comprehensive Exam at least 6 weeks prior to the date desired for the oral component or the examination may be delayed. Ms. Schwarz will be supplied with a date for the written component and a date for the oral component, which must occur within two weeks of the written component. Ms. Schwarz will then schedule a room for each event and inform Ms. Christy Bardell of the need to reserve an OEH laptop computer for the written examination.
Written Component
The time period of the written portion of the exam is 5 hours. The student will be allowed to bring the six articles for use during this time period and will respond to questions in a Word document using a supplied laptop computer. Handwritten notes on the articles will be permitted, but students will not be allowed the use of books or other notes. The following specific instructions are to be followed when sitting for the written component.

- On the day of the exam, the student and advisor picks up the laptop from OEH Front Office staff and brings it to the examination room where the advisor inspects it for internet capability.
- The advisor will insert a flashdrive containing a PDF copy of each article previously given to the student and a Word document that will be used by the student to answer questions. The Word document will be previously prepared by the advisor with questions related to each article. The advisor will also provide a printed set of the questions and a few extra pieces of white paper for making notes.
- The student will bring hard copies of the articles with any notes on them they desire. No other written information is allowed.
- If the exam goes over the lunch hour, the student is allowed to spend up to 30 minutes eating lunch, preferably at one of the desks in the OEH area, but not in the examination room. The student will inform the advisor when they leave for lunch and go back. The student is not allowed to read anything or look at a computer during a lunch break.
- When the time period is over: the Word doc is saved to the flash drive and handed to the advisor who distributes it to all committee members and the student; and the student returns the computer to OEH Front Office staff.

Oral Component
The oral component of the exam must occur within two weeks of completion of the written exam. The student will be allowed to bring the six articles with any handwritten notes. The student should bring a printed version of the file containing the questions and his/her answers.

The oral exam is expected to follow-up on areas and concepts emanating or omitted from the written exam, as well as those from departmental core courses and selected electives in areas related to the student’s research topic. Prior to questions by the committee, the student will be given the opportunity to address the Committee with any desired information pertinent to the answers given during the written component, such as providing additional explanation or clarification of statements made. Students will not be given an assessment of their performance on the written examination prior to the oral examination.

Outcomes
The student’s performance on the Comprehensive Examination will be evaluated by overall assessment of the two components of the exam and designated as “satisfactory”, “reservations”, or “unsatisfactory” by vote of the committee. (A vote of “reservations” is used when deficiencies displayed by the student were modest and can be readily rectified.) At least two unsatisfactory votes by the examining committee signify a failure of the PhD Comprehensive Examination. If a failure is ruled, the student may retake the exam one time, no sooner than 4 months after the examination and no later than 6 months. A second failure will result in dismissal. To avoid dismissal after a second failure, the student may request to be admitted into a departmental MS program to complete its requirements to obtain an MS degree. Acceptance into an MS program, in that case, will require a departmental faculty vote.
Responsibilities
The following actions are required as part of this examination:

Student
- Initiates action by communicating to the advisor and Graduate Program Coordinator of their intent to sit for the exam
- Sends requests to potential committee members if not already identified
- Schedules oral examination date and time with advisor and committee members
- Schedules written exam with advisor to be taken within two weeks prior to date of oral

Advisor
- Selects journal articles with committee input
- Coordinates writing exam questions with committee members
- Supplies student with articles two weeks prior to written exam
- Supervises written examination
- Brings grade sheet to, and chairs, the oral examination

Graduate Program Coordinator
- Supplies forms and advice when asked by student
- Returns grade sheet to Graduate College within 14 days of the oral exam

PhD Final Examination
Work towards the PhD degree culminates in a final oral examination or “defense” of the student’s dissertation. Formal approval of the dissertation research, through the Proposal Review process described above, must be obtained at least one semester prior to the semester of the Final Examination.

Time Consideration
The Final Examination may not be held until the next academic session after passing the Comprehensive Examination. 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 a reexamination of the student’s qualifications for taking the Final Examination.

A single, final deposit date for each semester is set by the Graduate College. See the Graduate College website for the date associated with the semester you plan to obtain the degree. The deposited dissertation occurs after the defense and after any additional changes required by the committee. At deposit, the dissertation needs to include all required elements, finalized content and must be properly formatted. To allow time to make final changes, the defense should take place no later than 10-14 days prior to the deposit date. Furthermore, the written dissertation must be distributed to the committee members at least two weeks prior to the thesis defense. Finally, the advisor should have up to two weeks to review and comment on a final draft by the student prior to submission to the committee. Therefore, the student should provide a defensible draft of the dissertation to his/her advisor at least 6 weeks prior to the deposit date – this is usually within the spring break time period if defending in the spring semester.
Committee
The Final Examination Committee and the Proposal Review Committee must consist of the same members. The committee makeup is described in the “Proposal Review” section (above).

Format
Instructions for preparing a dissertation to satisfy requirements set by this Department and the Graduate College are described in the next section, “Instructions for Preparation of a PhD Dissertation”. Previous PhD dissertations written by students of this department are available from the OEH front office or by accessing an OEH dissertation (given a known author) through the through the UI electronic thesis depository.

Process
The doctoral defense is open to the public and all members of the University of Iowa. An announcement giving the dissertation title; student name; date, place, and time of defense; and brief abstract is emailed to all CPH faculty, staff and students two weeks prior to the defense date. Contact the Graduate Student Coordinator for help with this announcement.

If an audience is present in addition to the student’s committee members, the defense will consist of the following format.

- The chairperson introduces the student and explains the format that will be followed to the audience.
  - May include asking the student to give a brief history of their academic/work history (what brought you to this point?).
- The student then gives summary overview of the objectives and important findings associated with their work.
  - Limit time to 45 minutes.
  - Talk should be addressed more towards audience than committee members who have already read the dissertation.
- The question-and-answer period then follows where initially the audience is allowed up to 20 minutes to ask questions. Following that time period, the committee members only will ask any additional questions.
- Upon completion of the question-and-answer period, the committee members will convene a closed-door session to discuss the student’s performance, review academic information, and sign form as desired. The Committee will: (1) conduct a critical inquiry into the purposes, methods, and results of the investigation – not a mere recapitulation of the procedures followed, and (2) question the student on areas of knowledge constituting the immediate context of their investigation.
- The student is informed of the result of the committee’s decision.
Outcomes
There are two outcomes associated with a dissertation defense. The oral performance and the overall condition of the dissertation will be designated as “satisfactory” or “unsatisfactory” by vote of the committee. Two unsatisfactory votes will make the committee report unsatisfactory, which constitutes a failure of the examination. If a failure is ruled, the student may retake the exam one time, no sooner than the next session (fall, spring, or summer) and no later than one year. A second failure will result in dismissal.

If less than two votes are “unsatisfactory”, the committee will then determine the acceptability of the contents of the student’s dissertation. Generally, some changes to the dissertation are requested by at least one committee member. The changes may be to reorganize a section, clarify a statement, or include additional information such as the inclusion of a figure or table. The student will then make the required changes and seek approval of them by the requesting committee member prior to making the deposit of the thesis. The official vote of acceptance of the dissertation by the committee member is made in an online form generated by the Graduate College after the student has deposited the dissertation via the ProQuest portal. During that process, a PDF of the deposited dissertation will be available for the committee member to view to be sure that the deposited dissertation contains any requested changes.

Responsibilities
It is the student’s responsibility to ensure that all work is performed, and all forms are submitted, in a timely manner to obtain the degree. The forms and timelines originate from the Graduate College, which ultimately confers the degree, not the department. A detailed checklist of duties and responsibilities required for obtaining a degree is available from the Graduate Program Coordinator (GPC).

Student:
- Notifies Graduate Program Coordinator (GPC) of intent to defend and works with GPC to satisfy all Graduate College requirements
- Sends requests to potential committee members
- Schedules defense date with advisor and committee members
- Completes the dissertation with sufficient time for review by advisor
- Submits dissertation to ProQuest portal before the Graduate College deadline
- Sends printed copies or PDF of the dissertation to advisor and committee members two weeks prior to defense
- Provides an electronic (PDF) copy of the accepted dissertation to the OEH secretary for departmental records

Student and Advisor:
- Selects committee members
- Determines potential defense date
- Reviews/edits student’s dissertation prior to submission to committee members

Advisor:
- Advises student on dissertation content
- Chairs dissertation defense
- Signs required forms

Graduate Program Coordinator:
- Supplies a detailed checklist, needed forms and advice when asked by student
- Distributes announcement of the dissertation defense
- Returns all forms to Graduate College
Instructions for Preparation of a PhD Dissertation

In the Department of Occupational and Environmental Health, a PhD Dissertation shall consist of at least three manuscripts that the Dissertation Committee deems suitable for publication on related subjects. The scope of the manuscripts shall be negotiated with the Dissertation Committee in advance.

Dissertation Composition

- The dissertation will contain three sections:
  - an introductory chapter,
  - chapters containing the body of a publishable manuscript (one per chapter),
  - a concluding chapter.

- The introductory chapter will:
  - outline the larger problems addressed in the research,
  - discuss the purpose and major goals of the research, and (if requested)
  - contain a comprehensive literature review of the research area.

- The concluding chapter will:
  - show how the manuscripts shine light on the larger problems mentioned in the introduction
  - address the significance of the research to the field(s) of Occupational and/or Environmental Health
  - mention any aspect(s) of the research not included in the manuscripts but worthy of discussion, and
  - discuss the potential for future research.

Formatting Guidelines

- In general, all instructions given by the University of Iowa Graduate College are to be followed when preparing the dissertation.

- In order to satisfy the format-check procedure of the Graduate College, the dissertation must appear in all ways as a typical dissertation. For example:
  - A chapter that contains a manuscript must be formatted as if it were a chapter in a typical dissertation.
  - The chapters must each contain a title and be numbered consecutively.
  - The format of subheadings must be consistent from chapter to chapter.

- Graphs and tables must be numbered in association with the chapter they are associated with (e.g. Figure 3.1 and 3.2 in Chapter 3 followed by Figure 4.1 and 4.2 in Chapter 4). They must also agree with the numbers given in the List of Figures and List of Tables.

- The same referencing style must be used throughout the dissertation regardless of whether the articles are submitted to different journals with different referencing styles.

- Given the comments above, some reformatting of a manuscript is expected prior to submission to the publisher.