

THE UNIVERSITY OF IOWA

Department of Occupational and Environmental Health

Student Handbook

2011-2012

DEPARTMENT OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH

Student Handbook

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Department Description

The Department of Occupational and Environmental Health 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. The Department Head is Dr. Peter Thorne.

The Institute for Rural and Environmental Health houses the Department of Occupational and Environmental Health. Its primary purpose is to provide educational experience through interdisciplinary research and teaching with respect to environmental factors that affect health. A major emphasis is placed on the occupational and environmental health problems in agriculture and industries.

The Institute endorses a multi-disciplinary approach that encourages collaboration and exchange of information among professionals of diverse academic departments and institutions, government agencies, and the private sector. The Institute's faculty and staff form the core of five research centers described below.

It is the general goal of the Institute to offer students the opportunity to participate in research and community health activities that will prepare them for a leadership career in environmental research, problem analysis, program development and hazard control.

Research Centers

The Department of Occupational and Environmental Health is home to 5 research centers which are the cornerstones of research, educational and outreach activities for the department. These centers bring in approximately \$2.5 million annually, and provide support for research activities conducted by faculty, graduate students, and post-doctoral trainees.

The Center for International Rural and Environmental Health (CIREH) offers travel funding and stipends for students to participate in the International Science Internship Program. This summer internship program is designed to provide students with international experience related to public health, environmental and occupational health in Central and Eastern Europe, Finland, or The Gambia (West Africa).

The Environmental Health Sciences Research Center (EHSRC) is one of 12 university-based environmental health core centers funded by the National Institute of Environmental Health Sciences. It is the only such center in the rural Midwest and the only center with a primary focus on rural environmental exposures and related injury and diseases.

The Great Plains Center for Agricultural Health (GPCAH) is a comprehensive program designed to study and respond to health and safety issues associated with the practice of agriculture. Research method development, implementation of novel disease and injury prevention programs, and training of health professionals in the area of agricultural health and

safety are some of the steps GPCAH has taken to improve the health of individuals in the agricultural community.

The Heartland Center for Occupational Health and Safety is a NIOSH-funded Education and Research Center (ERC) which provides graduate training, continuing education and outreach in occupational health and safety. The Heartland Center supports graduate student training in Agricultural Safety and Health, Ergonomics, Industrial Hygiene, Occupational Epidemiology, Occupational Injury Prevention, Occupational Health Nursing, and Occupational Medicine.

The Injury Prevention Research Center (IPRC) is the only injury prevention center nationwide to focus on rural injury issues. The stimulus for the IPRC was the lack of injury research focused on the contributing role of rural environments and farming. Statistics show that, with the exception of homicide, rural areas have the nation's highest injury death rates. While farming poses clear occupational hazards, motor vehicle accidents in rural settings also account for a large number of injuries and deaths. IPRC investigators are involved in studies to document other determinants of risk of injury and death in rural areas.

Outreach Programs

These programs bring the Department's knowledge and expertise out into the community where it can be applied to real-life problems. Students often participate in these outreach programs as part of their training.

Iowa's Center for Agricultural Safety and Health (I-CASH), a partnership of The University of Iowa, Iowa State University, the Iowa Department of Public Health, and the Iowa Department of Agriculture and Land Stewardship, coordinates and focuses the state's workers, and the agricultural community. Institute faculty and staff provide program support for many I-CASH activities including efforts to prevent injury and illness among farm youth and to provide comprehensive health and safety services to farm families throughout the state of Iowa.

WORKSAFE IOWA provides comprehensive, cost-effective services to solve occupational and environmental health problems for businesses and individuals throughout Iowa and the Midwest. It enhances the training program for graduate students by involving them in a practical, service-based, professional activity.

Departmental Faculty



Peter S. Thorne, PhD, Professor and Head (secondary appointment: Civil and Environmental Engineering). Director, Environmental Health Science Research Center (EHSRC); Director, Pulmonary Toxicology Facility; Director, Environmental Health Sciences Training Program. Current research interests: environmental triggers of asthma; bioaerosol toxicology; animal inhalation models of pulmonary diseases; organic dust-induced lung inflammation and hypersensitivity; exposure assessment methodologies for bioaerosols; indoor air quality - toxins, microbes and aeroallergens.



T. Renée Anthony, PhD, CIH, CSP, Assistant Professor. Current research interests: aerosol sampler design and testing, including a new high-flow inhalable particulate sampler; computational fluid dynamics modeling of contaminant transport; performance testing of respiratory protection devices in complex contaminant mixtures; occupational and community exposure assessments.



Thomas M. Cook, PT, PhD, Professor (secondary appointment: Graduate Program in Physical Therapy and Rehabilitation Sciences, adjunct professor, Slovak Medical University, Bratislava, Slovak Republic). Director, Ergonomics training program. Director, Center for International Rural and Environmental Health (CIREH). Associate Director, Injury Prevention Research Center (IPRC). Current research interests: ergonomics, including development of exposure assessment methods; electromyography; therapeutic applications of new technology; musculoskeletal injuries; international occupational safety and health; macro ergonomics, and uses of information/communications technology to advance global health.



Kelley J. Donham, MS, DVM, Professor (secondary appointment: College of Nursing). Director, Iowa's Center for Agricultural Safety and Health (ICASH); Agricultural Health graduate program. Current research interests: occupational and environmental hazards in agriculture; effects and control of the agricultural environment on human and animal health; comparative aspects of environmental neoplastic and infectious diseases; epidemiology of infectious disease hazards common to humans and animals.



Nathan Fethke, PhD, CPE, Assistant Professor. Current research interests: exposure assessment strategies in ergonomics, with emphasis on electromyography and other direct measurement technologies; ergonomic intervention effectiveness; musculoskeletal disorders and ergonomics in the construction and agriculture industries; occupational biomechanics; human response to whole-body and hand-arm vibration.



R. William Field, PhD, Professor (secondary appointment: Epidemiology). Director, Occupational Epidemiology Training Program, Heartland Center for Occupational Health and Safety. Current research interests: novel exposure assessment methods, environmental epidemiology, occupational epidemiology, radioepidemiology, cancer epidemiology, health physics, radon, and risk perception.



Laurence J. Fuortes, MD, Professor (secondary appointments: Internal Medicine, International Programs, and Epidemiology). Current research interests: medical surveillance; occupational injury epidemiology and prevention; occupational epidemiology, occupational and environmental toxicology, particularly neurotoxicity, and asthma.



Fredric E. Gerr, MD, Professor (secondary appointment: Internal Medicine). Current research interests: musculoskeletal disorders including an ongoing prospective epidemiologic study of hand and arm disorders among computer users and development of new diagnostic tests for carpal tunnel syndrome; occupational neurotoxicity, clinical and epidemiological investigation of heavy metal toxicity, clinical occupational medicine.



Hans-Joachim Lehmler, PhD, Associate Professor (Research), faculty member, Interdisciplinary Graduate Program in Human Toxicology. Current research interests focus on the toxicity of environmental contaminants present in the food chain and in drinking and surface water. Ongoing projects investigate the metabolism of chiral polychlorinated biphenyls (PCBs) by cytochrome P450 enzymes, the enantioselective effect of PCBs on developmental neurotoxicity, the interaction of fluorinated materials with pulmonary surfactant, and the role of fluorinated environmental contaminants in the fetal basis of adult disease.



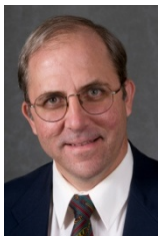
Gabriele Ludewig, PhD, Associate Professor. Current research interests: the mechanisms of toxicity, genotoxicity, and carcinogenicity of compounds found as contaminants in food and the environment. Special emphasis: halogenated compounds like polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs).



James A. Merchant, MD, DrPH, Professor (secondary appointments: Internal Medicine, College of Nursing). Director, Healthier Workforce Center for Excellence. Current research interests: rural and agricultural epidemiology; epidemiology of pulmonary diseases, particularly occupational lung diseases; environmental and occupational medicine organization and health care delivery; international health; public health and rural health policy.



Matthew W. Nonnenmann, PhD, CIH, Assistant Professor. Current research interests: occupational exposure to physical, chemical and biological agents among agricultural workers; characterization and assessment of occupational and environmental bioaerosol exposure; biomarkers of occupationally induced lung inflammation; epidemiology of musculoskeletal disorders and ergonomic exposure assessment among agricultural workers; and evaluation of respiratory protection and ergonomic interventions in the agricultural industry.



Patrick T. O'Shaughnessy, PhD, Professor and Associate Head for Student Affairs and Curriculum (joint appointment: Civil and Environmental Engineering). Current research interests: aerosol physics in support of inhalation toxicology research; control of workplace ventilation systems to mitigate airborne contaminant levels; measurement and modeling of ambient ammonia concentrations in the vicinity of concentrated animal feeding operations; development of human exposure systems.



David Osterberg, MA, MS, MS, Associate Professor (Clinical), (secondary appointment: Geography). Current research interests: global climate change policy; renewable energy; environmental taxes and funding of environmental initiatives; water resources management; agricultural economics.



Corinne Peek-Asa, PhD, MPH, Associate Dean for Research, College of Public Health, Professor (secondary appointments: Epidemiology and College of Nursing). Director, Injury Prevention Research Center (IPRC). Current research interests: epidemiology of violence in the workplace; elderly driver safety; biomechanics of pediatric head injuries; cultural and socioeconomic predictors of family violence; injuries from natural disasters; evaluation of injury prevention programs; and injury surveillance.



Thomas M. Peters, PhD, Associate Professor. Current research interests: mechanics of aerosols, including sampling and transport, instrumentation, and control device design; assessment and control of workplace particulate contaminants; and bioaerosols, including development of novel detectors and control strategies.



Marizen Ramirez, PhD, MPH, Assistant Professor. Current research interests: pediatric injuries, school-based injuries and violence, sports injuries, injuries to children with special health care needs, disaster epidemiology, emergency preparedness.



Larry W. Robertson, PhD, MPH, Professor (secondary appointment: Radiation Oncology), Director, Iowa Superfund Basic Research Program, Director, Interdisciplinary Graduate Program in Human Toxicology, is a toxicologist with expertise on halogenated environmental pollutants. Current research interests include: the mechanisms of toxicity/carcinogenicity of Polychlorinated Biphenyls (PCBs), their effects on gene regulation, their metabolic activation, and the involvement of reactive oxygen species/oxidative damage in toxification processes.



David Asa, Graduate Program Coordinator, facilitates the graduate program including recruiting, admissions, orientation and registration of graduate students. Additionally, Mr. Asa maintains student files, ensures that all paperwork is completed and can advise students on procedural issues related to obtaining their degrees.

Degree Program Information

MS Degree Occupational and Environmental Health

This program prepares graduate level students for professional careers in environmental and occupational health. 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:

1. Describe the direct and indirect human, ecological, and safety effects of major environmental and occupational hazards and agents.
2. Describe the general mechanisms of toxicity associated with the absorption, distribution, metabolism, and excretion of xenobiotics.
3. Describe regulatory programs, guidelines, and authorities that seek to control environmental health or occupational health issues.
4. Comprehend epidemiological principles that can be used to determine health outcomes associated with exposure to environmental or occupational hazards.
5. Apply biostatistical methods for interpreting the significance of occupationally or environmentally derived data relative to an exposure or health outcome.
6. Apply intervention and control approaches for assessing, preventing and controlling environmental and occupational hazards that impact human health and safety.
7. Implement a research project relevant to the peer-reviewed literature in environmental or occupational health.
8. Interpret orally and in writing the results and conclusions of a research project.

Prerequisites

A baccalaureate degree is required. Undergraduate preparation should include previous course work in mathematics, biological, chemical and either physical sciences or engineering (prerequisites depend on requirements of the chosen specialty area).

Required Courses

175:197	Environmental Health	3 s.h.
175:230	Occupational Health	3 s.h.
175:260	Environmental Toxicology	3 s.h.
175:180	Occupational & Environmental Health Seminar	1 s.h. *
171:161	Introduction to Biostatistics	3 s.h.
173:140	Epidemiology I: Principles	3 s.h.
069:133	Introduction to Human Pathology	4 s.h.
650:270	Principles of Scholarly Integrity	0 s.h.
		20 s.h.

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

Thesis

Completion and acceptance of a master's thesis is required. A maximum of **6** semester hours will be allowed for thesis credit hours (175:300). 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 28-29.

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 pages 29-31.

Total Semester Hours Required for MS Degree (Minimum) 38 s.h.

PhD Degree

Occupational and Environmental Health

This program prepares graduate level students in professional and academic careers in environmental and occupational health. Graduates will be able to assume responsibility for the development and basic administration of environmental and occupational health programs, and will qualify for beginning faculty positions in academic environmental health departments. Although enrollment directly into the PhD program is possible, completion of the MS program is recommended as a first step toward the PhD degree. The degree requires a minimum of 72 semester hours.

Graduates of the PhD in Occupational and Environmental Health will be able to:

1. Master the MS degree competencies.
2. Apply the biostatistical principles associated with the design and analysis of biomedical studies.
3. Demonstrate in writing and oral presentation an advanced knowledge of an environmental health or occupational health topic.
4. Analyze research literature in occupational and environmental health to identify gaps in knowledge.
5. Design and perform an independent research project using ethical principles.
6. Synthesize and integrate research results to guide occupational and environmental health policy and interventions.
7. Communicate research findings effectively to various audiences in writing and through oral presentation.

Prerequisites

A baccalaureate degree is required. Although enrollment directly into the PhD program is possible, completion of the MS program is recommended as a first step toward the PhD degree. Undergraduate preparation should include previous course work in mathematics, biological, chemical and either physical sciences or engineering (prerequisites depend on requirements of the chosen specialty area).

Required Courses

175:197	Environmental Health	3 s.h.
175:230	Occupational Health	3 s.h.
175:180	Occupational & Environmental Health Seminar	1 s.h.*
171:162	Design and Analysis of Biomedical Studies	3 s.h.
171:161	Introduction to Biostatistics	3 s.h.
173:140	Epidemiology I: Principles	3 s.h.
069:133	Introduction to Human Pathology	4 s.h.
650:270	Principles of Scholarly Integrity	1 s.h.
		21 s.h.

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

Elective Credits

A minimum of **24** 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 any combination of the research-related courses given below or other class-based courses.

175:300	Thesis/Dissertation
175:201	Research in Occupational and Environmental Health
175:172	Independent Study in Occupational and Environmental Health

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 28-30. A general description of the PhD assessment/examination process is given on page 27 and detailed descriptions are given on pages 32-37.

Total Semester Hours Required for PhD Degree (Minimum) 72 s.h.

MS Degree

Occupational and Environmental Health

Industrial Hygiene Subtrack

The Accreditation Board for Engineering and Technology (ABET) accredits the industrial hygiene MS training program. The overall goal of the program is to contribute to occupational disease prevention and injury prevention in industrial, environmental and agricultural sectors of Iowa, the region, and nationally, with an emphasis on addressing rural needs.

The program is designed to:

- Train industrial hygiene professionals needed regionally and nationally for careers in industrial, environmental, and agricultural settings and in research.
- Provide opportunities for supervised research and field experiences for industrial hygienists in training.
- Provide this training with an interdisciplinary approach that prepares industrial hygienists to practice as members of an occupational/environmental health team.

The MS curriculum is designed to prepare individuals both technically and philosophically to practice the science and art of Industrial Hygiene. Full accreditation of the MS program by the Accreditation Board for Engineering and Technology (ABET)-American Board of IH (ABIH) was received in 1995. The Industrial Hygiene program strives to maintain a balance between its historical emphasis on a small number of individually trained students and the required breadth of the interdisciplinary training implicit in the profession.

Graduates of the MS in Industrial Hygiene will be able to:

1. Describe the principal sources of occupational agents, routes of human exposure to these agents and the work processes that influence exposures.
2. Apply the principles, instrumentation, and techniques for exposure assessment of chemical, physical, and biological agents in the workplace and environment.
3. Identify the organization and functions of governmental agencies and regulatory bodies impacting occupational health.
4. Comprehend epidemiological principles that can be used to determine health outcomes associated with exposure to occupational hazards.
5. Apply biostatistical methods for interpreting the significance of occupationally derived data relative to an exposure or health outcome.
6. Implement a research project relevant to the peer-reviewed literature in environmental or occupational health.
7. Interpret orally and in writing the results and conclusions of a research project.

Prerequisites

A baccalaureate degree is required. Undergraduate preparation must include at least 63 semester hours in science, mathematics, engineering, and technology and 21 semester hours in communications, humanities, and social sciences.

Required Courses

175:231	Industrial Hygiene Fundamentals	3 s.h.
175:232	Assessing Physical Agent Hazards	3 s.h.
175:233	Control of Occupational Hazards	3 s.h.
175:221	Aerosol Technology	3 s.h.
175:230	Occupational Health	3 s.h.
175:192	Occupational Safety	3 s.h.
175:190	Occupational Ergonomics I	3 s.h.
175:260	Environmental Toxicology	3 s.h.
175:197	Environmental Health	3 s.h.
173:140	Epidemiology I: Principles	3 s.h.
175:182	Statistics for Experimenters	3 s.h.
175:180	Occupational & Environmental Health Seminar	1 s.h. *
650:270	Principles of Scholarly Integrity	0 s.h.
		34 s.h.

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

Thesis

Completion and acceptance of a master's thesis is required. A maximum of 6 semester hours will be allowed for thesis credit hours (175:300). Additional thesis credit hours may be allowed for students who take more than 43 semester hours. For instructions on thesis content see the section: General Instructions for Preparation of a MS Thesis and PhD Dissertation, pages 28-29.

Electives

Elective courses must be taken to fulfill the minimum number of semester hours required for this degree option. Students and advisors should select courses most appropriate to the individual student's professional goals.

Final Examination

The final examination for this option will consist of a defense of the MS thesis. For instructions on the format of the Final Examination see pages 29-31.

Total Semester Hours Required for MS Degree (Minimum) 43 s.h.

PhD Degree

Occupational and Environmental Health

Industrial Hygiene Subtrack

The overall goal of the program is to contribute to occupational disease prevention and injury prevention in industrial, environmental and agricultural sectors of Iowa, the region, and nationally, with an emphasis on addressing rural needs.

The goals of the program are:

- To train industrial hygiene professionals needed regionally and nationally for careers in industrial, environmental, and agricultural settings and in research at the PhD level.
- To provide opportunities for supervised research and field experiences for industrial hygienists in training.
- To provide this training with an interdisciplinary approach that prepares industrial hygienists to practice as members of an occupational/environmental health team.

The PhD program trains individuals to conduct and supervise research or to manage advanced applied programs in academic, governmental, or private industrial hygiene settings.

Graduates of the PhD in Industrial Hygiene will be able to:

1. Master the MS degree competencies.
2. Apply the biostatistical principles associated with the design and analysis of exposure and health-effect studies.
3. Demonstrate in writing and oral presentation an advanced knowledge of an occupational or environmental health topic.
4. Analyze research literature in industrial hygiene to identify gaps in knowledge.
5. Design and perform an independent research project using ethical principles.
6. Synthesize and integrate research results to industrial hygiene policy and interventions.
7. Communicate research findings effectively to various audiences in writing and through oral presentation.

Prerequisites

A baccalaureate degree is required. Although enrollment directly into the PhD program is possible, completion of the MS program is recommended as a first step toward the PhD degree. Undergraduate preparation must include at least 63 semester hours in science, mathematics, engineering, and technology and 21 semester hours in communications, humanities, and social sciences.

Required Courses

175:231	Industrial Hygiene Fundamentals	3 s.h.
175:232	Assessing Physical Agent Hazards	3 s.h.
175:233	Control of Occupational Hazards	3 s.h.
175:221	Aerosol Technology	3 s.h.
175:234	Quantitative Exposure Assessment	3 s.h.
175:230	Occupational Health	3 s.h.
175:192	Occupational Safety	3 s.h.
175:190	Occupational Ergonomics I	3 s.h.
175:260	Environmental Toxicology	3 s.h.
175:197	Environmental Health	3 s.h.
175:180	Occupational & Environmental Health Seminar	1 s.h. *
171:161	Introduction to Biostatistics	
	or	3 s.h.
175:182	Statistics for Experimenters	
173:140	Epidemiology I: Principles	3 s.h.
171:162	Design and Analysis of Biomedical Studies	3 s.h.
650:270	Principles of Scholarly Integrity	1 s.h.
		41 s.h.

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

Elective Credits

A minimum of **12** 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 any combination of the research-related courses given below or other class-based courses.

175:300	Thesis/Dissertation
175:201	Research in Occupational and Environmental Health
175:172	Independent Study in Occupational and Environmental Health

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 28-30. A general description of the PhD assessment/examination process is given on page 27 and detailed descriptions are given on pages 32-37.

Total Semester Hours Required for PhD Degree (Minimum) 72 s.h.

MS Degree

Occupational & Environmental Health

Agricultural Safety & Health Subtrack

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.

Students must complete the required courses and all of the courses from one of the focus areas below.

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

1. Describe basic concepts and theories of agricultural safety and health.
2. Comprehend epidemiological principles that can be used to determine health outcomes associated with exposure to occupational hazards.
3. Apply biostatistical methods for interpreting the significance of occupationally derived data relative to an exposure or health outcome.
4. Explain appropriate research design, methodological, and analytical approaches in relation to the field of agricultural safety and health science.
5. Demonstrate the ability to critically analyze agricultural safety and health intervention programs.
6. Design and implement a research project relevant to the peer-reviewed literature in agricultural safety and health.
7. Interpret and communicate orally and in writing the results and conclusions of a research project.

Prerequisites

A baccalaureate degree is required. Undergraduate preparation should include previous course work in mathematics, biological, chemical and either physical sciences or engineering (prerequisites depend on requirements of the chosen specialty area).

Required Courses

175:209	Rural Health and Agricultural Medicine	3 s.h.
175:196	Agricultural Safety: Theories and Practice	2 s.h.
175:210	Current Topics in Agricultural Health (Seminar)	1 s.h.*
175:203	Preceptorship in Occupational and Environmental Health	1 s.h.**
175:197	Environmental Health	3 s.h.
175:230	Occupational Health	3 s.h.
175:260	Environmental Toxicology	3 s.h.
175:180	Occupational & Environmental Health Seminar	1 s.h.***
171:161	Introduction to Biostatistics	3 s.h.
173:140	Epidemiology I: Principles	3 s.h.
069:133	Introduction to Human Pathology	4 s.h.
650:270	Principles of Scholarly Integrity	0 s.h.
		27 s.h.

* Enroll in Current Topics in Ag Health seminar two times: once for 0 s.h. and once for 1 s.h.

** 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.

Electives – must include all courses from one of the following focus areas:

1) Industrial Hygiene Focus Area

175:231	Industrial Hygiene Fundamentals	3 s.h.
175:232	Assessing Physical Agent Hazards	3 s.h.
175:233	Control of Occupational Hazards	3 s.h.
		9 s.h.

2) Ergonomics Focus Area

175:190	Occupational Ergonomics I: Principles and Methods	3 s.h.
056:144	Human Factors and Ergonomics I	3 s.h.
175:295	Clinical Ergonomics	3 s.h.
		9 s.h.

3) Occupational Epidemiology Focus Area

173:160	Introduction to Epidemiology Data Analysis with the Computer	2 s.h.
173:240	Epidemiology II: Advanced Methods	4 s.h.
175:220	Environmental and Occupational Epidemiology	3 s.h.
		9 s.h.

4) Occupational and Environmental Health Focus Area

This focus area is open for students who already have skill and knowledge by virtue of prior experience that may not fit in any of the focus areas above. Students and advisors should select courses most appropriate to the individual student's professional experience and goals. Elective courses must be chosen to fulfill the minimum MS degree requirement of 38 semester hours.

9 s.h.

5) Occupational Injury Prevention Focus Area

175:170	Injury and Violence Prevention	3 s.h.
175:251	Injury Epidemiology	3 s.h.
173:160	Introduction to Epidemiology Data Analysis with the Computer	2 s.h.
		8 s.h.

Thesis

Completion and acceptance of a master's thesis is required. A maximum of **2-3*** semester hours will be allowed for thesis credit hours (175:300). 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 28-29.

*the maximum number of thesis credit hours is 2 s.h. for Focus Areas 1-4, and 3 s.h. if the student chooses Focus Area 5

Final Examination

The final examination will consist of a defense of the MS thesis. For instructions on the format of the Final Examination see pages 29-31.

Total Semester Hours Required for MS Degree (Minimum) 38

PhD Degree

Occupational & Environmental Health Agricultural Safety & Health Subtrack

The PhD subtrack in Agricultural Safety and Health will offer specialized training at the doctoral level to prepare individuals for academic, research and policy-making careers in occupational and environmental health with a specialty in agricultural safety and health. This program will create the next generation of specialists and leaders in this growing field.

This program prepares graduate level students in professional and academic careers in environmental and occupational health. Graduates will be able to assume responsibility for the development and basic administration of environmental and occupational health programs, and will qualify for beginning faculty positions in academic environmental health departments.

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

1. Master the MS degree competencies
2. Demonstrate mastery of the concepts and theories of agricultural safety and health.
3. Apply the biostatistical principles associated with the design and analysis of biomedical studies.
4. Demonstrate expertise in appropriate agricultural safety and health research design and methodology.
5. Demonstrate knowledge regarding the anticipation, diagnosis, and treatment of agricultural illnesses.
6. Demonstrate the ability to ascertain an accurate agricultural occupational history, prepare an assessment plan, and design a mitigation regimen.
7. Identify knowledge gaps, synthesize relevant information, and formulate focused research questions to address the gaps in ASH risk factors and their mitigation.
8. Design and perform an independent research project.
9. Synthesize and integrate research results to guide agricultural safety and health policy and interventions.
10. Communicate research findings effectively, both written and orally.

Prerequisites

A baccalaureate degree is required. Although enrollment directly into the PhD program is possible, completion of the MS program is recommended as a first step toward the PhD degree. Undergraduate preparation must have included at least two semesters of chemistry, one semester of physics, and one semester of calculus. Course work in biological science, microbiology and computer programming is recommended, particularly for students interested in some specialized areas. Undergraduate preparation should include previous course work in mathematics, biological, chemical and either physical sciences or engineering (prerequisites depend on requirements of the chosen specialty area).

Required Courses

175:209	Rural Health and Agricultural Medicine	3 s.h.
175:196	Agricultural Safety: Theories and Practice	2 s.h.
175:210	Current Topics in Agricultural Health (Seminar)	1 s.h.*
175:203	Preceptorship in Occupational and Environmental Health	3 s.h.**
173:157	Zoonotic Diseases	2 s.h.
175:xxx	Advanced Agricultural Safety and Health	2 s.h.
175:197	Environmental Health	3 s.h.
175:230	Occupational Health	3 s.h.
175:180	Occupational & Environmental Health Seminar	1 s.h.*
171:162	Design and Analysis of Biomedical Studies	3 s.h.
171:161	Introduction to Biostatistics	3 s.h.
173:140	Epidemiology I: Principles	3 s.h.
069:133	Introduction to Human Pathology	4 s.h.
650:270	Principles of Scholarly Integrity	1 s.h.
		34 s.h.

*Enroll three times: twice for 0 s.h. and once for 1 s.h.

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

Electives must include all courses from one of the following focus areas:

Industrial Hygiene Focus Area

175:231	Industrial Hygiene Fundamentals	3 s.h.
175:232	Assessing Physical Agent Hazards	3 s.h.
175:233	Control of Occupational Hazards	3 s.h.
175:221	Aerosol Technology	3 s.h.
175:234	Quantitative Exposure Assessment	3 s.h.
175:192	Occupational Safety	3 s.h.
175:190	Occupational Ergonomics	3 s.h.
175:260	Environmental Toxicology	3 s.h.
		24 s.h.

Ergonomics Focus Area

175:190	Occupational Ergonomics I: Principles and Methods	3 s.h
056:144	Human Factors	3 s.h
175:295	Clinical Ergonomics	3 s.h
175:294	Occupational Ergonomics II	3 s.h.
051:152	Ergonomics of Occupational Injuries	3 s.h.
		15 s.h.

Occupational Epidemiology Focus Area

173:160	Introduction to Epidemiology Data Analysis with the Computer	2 s.h.
175:185	Occupational Health Research Seminar	2 s.h
173:240	Epidemiology II: Advanced Methods	4 s.h.
175:220	Occupational and Environmental Epidemiology	3 s.h.
		11 s.h.

Occupational Injury Prevention Focus Area

175:170	Injury and Violence Prevention	3 s.h.
175:251	Injury Epidemiology	3 s.h.
175:253	Epidemiology of Occupational Injuries	3 s.h.
173:160	Intro to Epidemiology Data Analysis with the Computer	2 s.h.
		11 s.h.

Occupational and Environmental Health Focus Area

This focus area is open for students who already have skill and knowledge by virtue of prior experience that may not fit in any of the focus areas above. Students and advisors should select courses most appropriate to the individual student's professional experience and goals. A minimum of **24** additional credit hours (in addition to those above) 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.

24 s.h.

Research Credits

The remaining credits needed to achieve the 72 required for this degree may be acquired by any combination of the research-related courses given below or other class-based courses.

175:300	Thesis/Dissertation	
175:201	Research in Occupational and Environmental Health	
175:172	Independent Study in Occupational and Environmental Health	

Summary: Total Semester Hours Required for PhD Degree (Minimum)

Industrial Hygiene Focus

Required Courses	33 s.h.
Focus Area Electives	24 s.h.
Research or Elective Credits	15 s.h.
Total semester hours required for PhD degree	72 s.h.

Ergonomics Focus

Required Courses	33 s.h.
Focus Area Electives	15 s.h.
Research or Elective Credits	24 s.h.
Total semester hours required for PhD degree	72 s.h.

Occupational Epidemiology Focus

Required Courses	33 s.h.
Focus Area Electives	11 s.h.
Research or Elective Credits	28 s.h.
Total semester hours required for PhD degree	72 s.h.

Injury Prevention Focus

Required Courses	33 s.h.
Focus Area Electives	11 s.h.
Research or Elective Credits	28 s.h.
Total semester hours required for PhD degree	72 s.h.

Occupational and Environmental Health Focus

Required Courses	33 s.h.
Focus Area Electives	24 s.h.
Research or Elective Credits	15 s.h.
Total semester hours required for PhD degree	72 s.h.

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 28-30. A general description of the PhD assessment/examination process is given on page 27 and detailed descriptions are given on pages 32-37.

Total Semester Hours Required for PhD Degree (Minimum) 72 s.h.

MPH Degree

Occupational and Environmental Health Subtrack

Objective

The MPH in occupational and environmental health program aims to prepare graduate level students for professional careers in environmental and occupational health. It targets students who already have a graduate or professional degree or have public health experience. The graduates of the program will have a broad overview of the public health perspective on occupational and environmental health and will be ready to hold a wide variety of jobs in that area.

Graduates of the MPH subtrack 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.
3. Comprehend the epidemiological principles needed to determine etiologic factors in human disease and the determinants of disease.
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.

Prerequisites

An undergraduate degree is required. The cumulative grade point average should be a minimum of a 3.0 on a 4.0 scale. Although no specific major is required, prerequisite coursework includes one semester each of college algebra and biology.

MPH Core Courses

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

170:101	Introduction to Public Health Practice	3 s.h.
171:161	Introduction to Biostatistics	3 s.h.
172:101	Introduction to Health Promotion and Disease Prevention	3 s.h.
173:140	Epidemiology I: Principles	3 s.h.
175:197	Environmental Health	3 s.h.
174:102	Introduction to the U.S. Healthcare System	3 s.h.
		18 s.h.

Practicum Requirement

170:299	MPH Practicum Experience	3 s.h.
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The experience from this course, including a final written report and oral presentation constitutes the final examination for the MPH.

Pre-Requisite to MPH Practicum:

Students must complete all MPH core courses prior to registering for the Practicum.

For additional information regarding the practicum experience, please visit the official practicum website: <http://www.public-health.uiowa.edu/mph/practicum/about.html>

Bioscience Requirement* or elective if previous course taken in bioscience

Any one of the following courses may be used to meet this requirement:

069:133	Introduction to Human Pathology Offered Fall semester only	4 s.h.
069:270	Pathogenesis of Major Human Diseases Offered Spring semester only	3 s.h.
		3-4 s.h.

*If a student has had such coursework in the past, a bioscience course does not need to be taken, but the hours are replaced with three more hours of electives.

Required Courses

175:180	Occupational and Environmental Health Seminar	1 s.h.*
	Additional required courses	16-17 s.h.
		17-18 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.

The remaining courses must include at least 12 hours of Occupational & Environmental Health (175:xxx) courses not already listed above and any other courses approved by the advisor.

Summary of requirements

MPH Core Courses	18 s.h.
Practicum Requirement	3 s.h.
Bioscience Requirement or Elective	3-4 s.h.
Required Courses	17-18 s.h.
Total	42 s.h.

Total Semester Hours Required for MPH Degree (Minimum) 42 s.h.

MPH Degree Ergonomics Subtrack

Objective

The MPH with an ergonomics focus draws from the multi-disciplinary expertise and interests of faculty from the Colleges of Public Health, Engineering, and Medicine. The interdisciplinary ergonomics program will require approximately two years of study. Students enrolled in this public health specialty will receive academic and practical experience in the field of ergonomics.

The goals of the ergonomics focus are for students to have:

- A thorough understanding of the physical environment and risk factors at the workplace that contribute to musculoskeletal injuries and illness.
- Knowledge of the engineering and administrative methods of controlling these risk factors.
- The ability to conduct workstation analyses and facility walkthroughs, use established ergonomics problem solving methods, and recommend solutions.

Graduates of the MPH in ergonomics may work for industry, unions, government agencies, or pursue further academic training.

Graduates of the MPH subtrack in Ergonomics will be able to:

1. Comprehend ergonomic principles that ensure the musculoskeletal health of workers.
2. Describe anthropometric, physiological, and biomechanical aspects of work.
3. Describe ways to reduce risk factors associated with occupational injuries & illnesses.
4. Explain the current regulatory issues concerned with ergonomics.
5. Demonstrate the ability to measure physical limitations and capabilities of workers.
6. Evaluate current ergonomic literature.
7. Conduct an ergonomic assessment/audit.
8. Participate in the development, design, implementation, and evaluation of an ergonomic intervention.

Prerequisites

An undergraduate degree is required. The cumulative grade point average should be a minimum of a 3.0 on a 4.0 scale. Although no specific major is required, prerequisite coursework includes one semester each of college algebra and biology.

MPH Core Courses

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

170:101	Introduction to Public Health Practice	3 s.h.
171:161	Introduction to Biostatistics	3 s.h.
172:101	Introduction to Health Promotion and Disease Prevention	3 s.h.
173:140	Epidemiology I: Principles	3 s.h.
175:197	Environmental Health	3 s.h.
174:102	Introduction to the U.S. Healthcare System	3 s.h.
		18 s.h.

Practicum Requirement

170:299	MPH Practicum Experience	3 s.h.
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The experience from this course, including a final written report and oral presentation constitutes the final examination for the MPH.

Pre-Requisite to MPH Practicum:

Students must complete all MPH core courses prior to registering for the Practicum.

For additional information regarding the practicum experience, please visit the official practicum website: <http://www.public-health.uiowa.edu/mph/practicum/about.html>

Required Courses

175:180	Occupational and Environmental Health Seminar	1 s.h.*
175:190	Occupational Ergonomics I	3 s.h.
175:230	Occupational Health	3 s.h.
056:147	Ergonomics: Design and Evaluation	3 s.h.
175:295	Clinical Ergonomics	3 s.h.
056:144	Human Factors and Ergonomics I	3 s.h.
650:270	Principles of Scholarly Integrity	0 s.h.
		16 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.

Elective Courses

Three semester hours are required. Electives may be chosen from the following list or may include any related course approved by the student's advisor.

175:192	Occupational Safety	3 s.h.
175:231	Industrial Hygiene Fundamentals	3 s.h.
175:251	Injury Epidemiology	3 s.h.
175:253	Epidemiology of Occupational Injuries	3 s.h.
		5 s.h.

Summary of requirements

MPH Core Courses	18 s.h.
Practicum Requirement	3 s.h.
Required Courses	16 s.h.
Elective Courses	5 s.h.
Total	42 s.h.
Total Semester Hours Required for MPH Degree (Minimum) 42 s.h.	

Departmental Course List

Number	Course Title	Instructor	Hours	Offered
OEH:3210 (175:101)	Health, Work and the Environment	Osterberg	3 s.h.	Spring
OEH:4110 (175:196)	Agricultural Safety: Theories & Practice	Donham	2 s.h.	Fall
OEH:4210 (175:111)	International Health	Fuortes	3 s.h.	Fall
OEH:4220 (175:252)	Environmental Health Policy	Osterberg	3 s.h.	Fall, odd
OEH:4230 (175:195)	Global Environmental Health	Cook	2 s.h.	Spring, odd
OEH:4240 (175:197)	Environmental Health	Thorne/Ludewig	3 s.h.	Fall, Spring (web)
OEH:4310 (175:190)	Occupational Ergonomics I	Fethke	3 s.h.	Fall
OEH:4510 (175:170)	Injury and Violence Prevention	Peek-Asa	3 s.h.	Fall
OEH:4520 (175:175)	Research Methods in Disaster Studies	Peek-Asa	3 s.h.	Spring, odd
OEH:4540 (175:182)	Statistics for Experimenters	O'Shaughnessy	3 s.h.	Fall
OEH:4920 (175:198)	Solid and Hazardous Wastes	Scherer	3 s.h.	Spring
OEH:5010 (175:180)	Occ & Env Health Seminar	Merchant	0/1 s.h.	Fall, Spring
OEH:5020 (175:185)	Occupational Health Research Seminar	Gerr	2 s.h.	Fall, Spring
OEH:5120 (175:211)	Veterinary Public Health: The Profession	Donham	1 s.h.	Summer
OEH:5410 (175:192)	Occupational Safety	Anthony	3 s.h.	Fall, odd
OEH:5620 (175:230)	Occupational Health	Merchant/Anthony	3 s.h.	Fall
OEH:5810 (175:260)	Environmental Toxicology	Fuortes/Thorne	3 s.h.	Spring
OEH:6110 (175:209)	Rural Health and Agricultural Medicine	Donham	3 s.h.	Spring, Summer
OEH:6120 (175:210)	Current Topics in Agricultural Health	Donham	1 s.h.	Fall
OEH:6310 (175:295)	Clinical Ergonomics	Fethke	3 s.h.	Spring
OEH:6320 (175:294)	Occupational Ergonomics II	Cook	3 s.h.	Spring
OEH:6420 (175:231)	Industrial Hygiene Fundamentals	Faculty	3 s.h.	Fall
OEH:6430 (175:232)	Assessing Physical Agent Hazards	Anthony	3 s.h.	Spring, odd
OEH:6440 (175:233)	Control of Occupational Hazards	Peters	3 s.h.	Spring, even
OEH:6450 (175:221)	Aerosol Technology	Peters	3 s.h.	Fall
OEH:6460 (175:234)	Quantitative Exposure Assessment	Anthony	3 s.h.	Spring, odd
OEH:6510 (175:220)	Environmental and Occupational Epidemiology	Field	3 s.h.	Spring
OEH:6520 (175:251)	Injury Epidemiology	Ramirez	3 s.h.	Spring, odd
OEH:6530 (175:253)	Epidemiology of Occupational Injuries	Ramirez	3 s.h.	Spring, even
OEH:6610 (175:285)	Advanced Topics in Occupational Medicine	Gerr	2 s.h.	Fall
OEH:6720 (175:265)	Advanced Toxicology	Robertson	4 s.h.	Fall, even
OEH:7000 (175:300)	Thesis/Dissertation	Faculty	arr.	
OEH:7110 (175:171)	Problems in OEH	Faculty	arr.	
OEH:7120 (175:172)	Independent Study in OEH	Faculty	arr.	
OEH:7130 (175:201)	Research in OEH	Faculty	arr.	
OEH:7140 (175:203)	Preceptorship in OEH	Faculty	arr.	
OEH:8610 (175:996)	Occupational Medicine	Gerr	4 s.h.	

MS/PhD Examination Policies and Procedures

Overview

This section of the handbook combines all aspects of the examination policies and procedures associated with obtaining an MS and PhD. These policies and procedures apply to degrees in OEH, ASH and IH. Two introductory sections give a general framework for the content of a MS thesis and PhD dissertation expected in this department as well as the format of a typical defense. These sections are followed by specific instructions related to obtaining MS and PhD degrees as outlined below. The sections combine 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. Both are available on-line at: <http://www.grad.uiowa.edu/>

MS Degree

For the MS in Occupational & Environmental Health, Industrial Hygiene and Agricultural Safety & Health, the examination consists of the Thesis Defense, an oral examination of the content of the written thesis. Review pages 29-31 for detailed information concerning this examination.

PhD Degree

The examination process associated with obtaining a PhD is rigorous and consists of four distinct processes as outlined below. Detailed information concerning the dissertation and defense procedures is given on pages 28-30. Information associated with these four processes is given on pages 32-37.

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.

General Instructions for Preparation of a MS Thesis or PhD Dissertation

Master's 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.

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.

Thesis/Dissertation Composition

- The thesis or dissertation will contain three sections:
 - an introductory chapter,
 - a chapter, or 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 in the document titled, "Thesis Manual", published by the University of Iowa Graduate College are to be followed when preparing the thesis or dissertation.
- In order to satisfy the format-check procedure of the Graduate College, the thesis or dissertation must appear in all ways as a typical thesis or dissertation. For example:
 - A chapter that contains a manuscript must be formatted as if it were a chapter in a typical thesis or dissertation.
 - The chapters must each contain a title and be numbered consecutively.
 - The format of subheadings must be consistent from chapter to chapter.

- 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 thesis or dissertation regardless of whether the articles are submitted to different journals with different referencing styles.
- As for a typical thesis or dissertation, there can be only one Abstract (Abstract not required for MS thesis), at the beginning, and one Bibliography, at the end, of the thesis or dissertation. However, each chapter containing a manuscript could include an initial subheading titled, “Summary of Findings” (or equivalent terminology) that would, in essence, be the abstract included with that article.
- Given the comments above, some reformatting of a manuscript is expected prior to submission to the publisher.

Departmental Format for Conducting the Defense of a MS Thesis or PhD Dissertation

Announcements, in the form of printed sheets and email to all OEH faculty, staff and students, are made giving the thesis title; student name; date, place, and time of defense; and brief abstract are posted/sent two weeks prior to the defense date.

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 his/her work.
 - Limit time to 20-40 minutes.
 - Talk should be addressed more towards audience than committee members who have already read the thesis/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 student is informed of the result of the committee’s decision.

Defense Responsibilities – MS and PhD

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
- Sends requests to potential committee members
- Schedules defense date with advisor and committee members
- Completes thesis with sufficient time for review by advisor
- Prints and sends copies of thesis to advisor and committee members prior to defense
- Works with GPC to satisfy all Graduate College requirements
- Satisfies all Departmental requirements as given in the Detailed Checklist
- Provides 3 unbound copies of the accepted thesis/dissertation to the advisor for binding by the department prior to obtaining the advisor's signature on the thesis/dissertation signature page
- Obtains committee signatures on thesis signature page

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
- Brings student file and Final Examination form to defense
- Signs required forms

Graduate Program Coordinator

- Supplies a detailed checklist, needed forms and advice when asked by student
- Provides advisor with student file for defense (containing the Report on Final Examination form)
- Returns all forms to Graduate College
- Distributes announcement of thesis/dissertation defense

Master's Examination

A defense of the master's thesis will serve as the Master's Final Examination. The defense is an oral presentation of the purpose, methods, and results of the thesis research. A committee will thoroughly examine the student's area of knowledge associated with the context of the work. It is acceptable to link the defense to a departmental seminar. The Master's thesis must be directed by an Occupational and Environmental Health faculty member but not necessarily the student's academic advisor. 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.

Examining Committee

The thesis committee shall consist of at least three members of the graduate faculty as recommended by the student and approved by the student's academic advisor; these members shall include the student's advisor and at least two members from this department. (see Section X.K. of the *Manual of Rules and Regulations of the Graduate College*) The committee will thoroughly examine the student's area of specialized knowledge associated within the context of the thesis work and electives of interest pursued by the student. 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 during a period of open-ended questions. The student is expected to have a completed, hard copy of their thesis to the committee at least 2 weeks prior to the defense date.

Thesis Defense Grade

An approval is required by the committee before the final submission of the thesis to the Graduate College. A failure on the master's thesis defense is interpreted as an insufficient attempt at the thesis. The committee may encourage the student to polish the thesis or to abandon it.

Time Consideration

Deadlines are set by the Graduate College for the initial and final submissions of the thesis. See the Graduate College website for deadlines associated with the semester you plan to obtain the degree. The Graduate College requires that the First Deposit of the thesis be a copy of the final draft to be submitted. The Graduate College will accept minor modifications as per the committee's recommendations after a defense but will not accept substantial changes such as the inclusion of another figure or table without written consent from the advisor. As such, the student should strive to complete the thesis at least two weeks prior to the First Deposit. This will allow sufficient time for review by the advisor and changes based on that review in order to submit a near-complete version of the thesis at the time of the First Deposit.

Student 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. A detailed list of the various responsibilities for obtaining the degree can be found on page 30.

PhD Examinations

PhD examinations in this department include a Comprehensive Examination and a Final Examination (Dissertation Defense). A faculty member of this Department (primary or secondary appointment) is needed as an advisor prior to sitting for these exams. It is the student's responsibility to obtain an advisor who is interested in the intended area of research. The research advisor will serve as the chairperson of both exams. In addition to these exams the student will meet with a committee to assess their academic background and research interests (Preliminary Assessment) and to formally approve their dissertation proposal (Proposal Review). The Preliminary Assessment must precede the Proposal Review and both Examinations. A deviation from this directive, or any other stated below, must be approved by majority vote of departmental faculty. In addition to these formal meetings of the student's doctoral committee, it is highly recommended that the student organize and carry out informal committee meetings at least once per year.

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 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.

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.

The Prelim Committee will be selected jointly by the student and advisor and will consist of three to five members of the Graduate Faculty of which at least two are from this Department.

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.

- (1) A copy of their transcript and Plan of Study.
- (2) A resume containing career objectives, educational background, relevant work history, published works, conference abstracts, association memberships, awards, and other relevant information.
- (3) 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.

The student will also prepare a presentation that describes any research to date and a summary of ideas that could lead to an acceptable dissertation as described on page 28 of this handbook.

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. 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.

Preliminary Assessment 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. 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:

The comprehensive and final examinations are conducted by committees of no fewer than five 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 four 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.

A department or program may impose additional structure on the composition of its examining committees.

Departments and programs may request the dean's permission to replace one of the five 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.

The proposal review process will involve a meeting of the student and committee members. A written 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.

The proposal must be written to satisfy the requirements established for dissertations in this department as described on page 28 of this handbook. The proposal format will be that of an NIH-style R21 grant. A description of this grant type can be found at: <http://grants.nih.gov/grants/funding/r21.htm>. Essentially, the proposal will be a maximum of 15 pages long and include a "Specific Aims" page, a section on the "Background and Significance" of the project, and a "Research Plan" that will include a detailed description of your dissertation research. The research may be separated into 3 or more aims that coincide with the 3 or more journal articles that will result from the dissertation. Your advisor should also be consulted to provide guidance on content.

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.

During or soon after the proposal review process, 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.

Proposal Review 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 Rule and Regulations of the Graduate College*. This examination must be taken before the end of the 5th semester of study. Furthermore, the Graduate College requires that this examination must occur before the session in which the dissertation defense is held.

The examination committee will consist of at least five members of the graduate faculty as previously explained (under “Proposal Review”). 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.

The examination will consist of both a written and oral component. 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 for review. These articles will reflect topics related to the student's research and professional goals. The student will then take a five-hour (maximum) examination consisting of questions prepared by the Committee. 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 be allowed to bring the articles to the written and oral portions of the exam. Calculators and handwritten notes on the articles will be permitted, but students will not be allowed the use of books or other notes. Students may be allowed the use of a computer to

complete the exam. Both the software and files available on the computer will be specified and monitored by the Advisor.

The subsequent oral component of the exam must occur within two weeks of completion of the written exam. 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. Students will not be given an assessment of their performance on the written examination prior to the oral examination.

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 signify a failure. If a failure is ruled, the student may retake the exam one time, no sooner than the following term (Spring or Fall) and no later than 12 months after the original exam. At the conclusion of the written and oral exams, the advisor will write a letter to the student and committee members summarizing the student's performance and examination outcome. A copy of this letter must also be given to the Graduate Program Coordinator.

Comprehensive Examination 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
- Writes summary letter following the Examination and provides copy to the student, committee members, and Graduate Program Coordinator

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. 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). 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.

The written dissertation must be distributed to the committee members at least two weeks prior to the dissertation defense. General instructions for preparing a dissertation to satisfy requirements set by this Department are described in a previous section of this handbook (p. 30). The student should be aware that, in addition to these requirements, guidelines set by the Graduate College must also be followed. These guidelines are given in the Graduate College “Thesis Manual” available on the web. Consulting other dissertations kept in the IRC and scientific writing guides is also recommended. Examples of the latter include:

Madsen D: *Successful Dissertations and Theses*, Jossey/Bass, 1992.

Katz MJ: *Elements of the Scientific Paper*, Yale University Press, 1985.

Gibaldi J: *The MLA Handbook for Writers of Research Papers*. Modern Languages Association of American, 1993.

The Final Examination is based on the student’s oral presentation of the purpose, methods, results, and conclusions of the dissertation research. After the presentation, 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 doctoral defense is open to the public and must be advertised in the University’s *FYI* newsletter. Faculty members of the Graduate College are especially invited to attend and, subject to the approval of the chair, to participate in the examination.

The report of the Final Examination is due in the Graduate College office no later than 48 hours after the examination. Final Examination performance will be designated as “satisfactory” or “unsatisfactory” by vote of the committee. At least two unsatisfactory votes results in an unsatisfactory report. In the case of an unsatisfactory report, the candidate may not be reexamined until the next session (fall, winter, or summer). The examination may be repeated only once.

Final Examination Responsibilities

A list of responsibilities common to the defense of an MS Thesis and PhD Dissertation are given on page 30 of this handbook.

General Student Information

Student 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 Graduate College and 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: <http://www.grad.uiowa.edu/graduate-college-manual>.
- Check their email messages frequently and mailbox at IREH regularly as this is how curriculum and departmental information will be communicated.
- Provide the departmental Graduate Program Coordinator with address and telephone changes.

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 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 Associate Head for Student Affairs and Curriculum, Dr. Patrick O'Shaughnessy, and the Graduate Program Coordinator, Mr. David Asa. 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. Mr. Asa 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 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.

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 residence requirement" of this University. The academic residence requirement is defined as the minimum number of course credits 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 residency 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 graduate semester hours may be transferred to complete the 38 hours needed for an MS in OEH.

PhD Degree. To satisfy the residency requirement for the PhD degree a student must (1) be enrolled at this University full-time (9 graduate credit hours minimum) in each of two semesters, or (2) be enrolled for at least 6 graduate credit hours per semester in each of three semesters during which the student also holds at least a one-quarter-time assistantship position. The Graduate College determines whether either of these two criteria has been met by assessing courses taken after those which make up the first 24 credit hours given on the approved list of transferable courses by Admissions. This rule implies that a minimum of 18 graduate credit hours must be taken under the auspices of the University of Iowa and that a maximum of 54 semester hours can be transferred toward the 72 hours needed for a PhD degree.

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 in order 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 (175:172), 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.

Academic 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 (175:300) and dissertation research credits (175:201). An option of obtaining a letter grade or S/U designation exists for independent study (175:172) and preceptorship (175:203). 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.

Academic Standing

Any student in the Department of Occupational and Environmental Health, who receives more than six semester hours of C+ or lower on courses included in the student's plan of study, including any transfer hours, will be dismissed from the program. The dismissal may be appealed in writing to the head of the department. Student appeals must be voted on by the departmental faculty within two semesters, including summer session, from the end of the semester in which the last C+ or lower grade was received. To avoid failing this rule, a student may elect to retake a course, in which case the new grade, if higher, will be used to evaluate this rule. (Note: retaking a course does not remove the first grade obtained from a student's transcript.) The course must be retaken before a student exceeds this rule.

While pursuing a degree, MS degree students are expected to maintain a 2.75 or better grade-point average (GPA) and PhD degree students are expected to maintain a 3.00 or better GPA. A student with less than the minimum GPA after 8 or more semester hours of graduate work will be placed on probation by the Graduate College. If, after completing 8 more semester hours of graduate work, the student's GPA remains below the minimum, the student will be denied permission to register, otherwise the student will be restored to good standing. See Sec. IV.A of the *Manual of Rules and Regulations of the Graduate College* for details.

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 ISIS registration system on the internet at <http://isis.uiowa.edu>. In order to register, students must request that their faculty advisor grant them permission via a checkbox accessible through OSIRIS. 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 eight 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. Students should be aware that failure to drop classes by the established deadline will result in a successively increased percentage of the tuition fee assessment. Significant deadlines for each semester are given on the Registrar's website: <http://www.registrar.uiowa.edu/Calendars/AcademicDeadlines/tabid/67/Default.aspx>.

Drop and Add forms are available at

<http://www.registrar.uiowa.edu/Student/FormsforStudents/tabid/79/Default.aspx>.

Policies Affecting Students

General University policies associated with student rights at the University level are given at the following website: <http://student-services.uiowa.edu/students/policies/index.php>

Information on Academic Standing, Probation and Dismissal: <http://www.grad.uiowa.edu/manual-part-1-section-iv-academic-standing-probation-and-dismissal>

The University of Iowa Academic Grievance Procedures: <http://www.grad.uiowa.edu/academic-policies/academic-grievance-procedure>

Policy on Sexual Harassment and Consensual Relationships: <http://www.uiowa.edu/~eod/policies/index.html>

Policy for Language Proficiency and Communication: http://cph.uiowa.edu/faculty-staff/faculty/handbook/pdf/Chapter_X.pdf

Plagiarism

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

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: <http://www.uiowa.edu/~sds/>.

Expectations of Graduate Students

A graduate student has the **primary responsibility for successful completion of his or her degree**. A graduate student should be committed to his or her 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 work with his/her 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 his/her advisor to select a thesis/dissertation committee.
- 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 his/her 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.
- Shall attend the course Principles of Scholarly Integrity (650:270) and practice those guidelines in conducting thesis/dissertation research.
- 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 doctoral degree. The student should seek guidance from available resources, including the research advisor, career counseling services, thesis/dissertation committee, and any other mentors.

IREH Student Services

Information Resource Center (163 IREH)

The IRC has a collection of approximately 800 books and 70 core journals focusing on occupational and environmental health, injury prevention, toxicology, ergonomics and farm safety. In addition, there is a collection of OEH student theses and dissertations, plus an archive of older print journals (located in the IH/ergonomics garage).

This room is open and available to students at all times. The IRC has three computers, a color scanner, and a typewriter for student use. The IRC is staffed on weekdays by Julia Venzke, MLS.

She is eager (in person or via email) to assist students in the following areas:

- Search strategies for literature reviews
- Suggestions of bibliographic databases appropriate to research topic
- Instruction on the UI Libraries Article Delivery and Interlibrary Loan services
- Maintenance of OEH student organization websites, such as I3HSA

Computers are available in the OEH Student Computer Room - 213 IREH. Also, computer labs are located in the General Hospital and Westlawn. Additional computer facilities are available in Bowen Science Building, the Medical Research Center, and the Hardin Library.

Desk space for students with a GRA appointment will be provided if space is available.

Copiers are located in IREH 121 & 233N. Students wishing to make personal copies must set up an account – see the IREH front office, for information.

Word Processing services for graduate students cannot be accommodated by the department clerical staff. Departmental policy states that secretarial computer equipment, printers, or typewriters are not to be used by faculty, staff, or students.

Nice-to-Knows

The following information has been contributed by the supervisors of the secretarial support staff. Feel free to contact them regarding questions or concerns—they are most helpful.

Brenda Schropp, 124 IREH
IREH Secretary

David Asa, 106 IREH
Graduate Program Coordinator

Student Mailboxes: The student mailboxes are located in the first floor south hallway at IREH.

U.S. Mailbox: Located at 121 IREH. Check with receptionist for pick-up and delivery times.

Campus Mail: Located at 121 IREH. Delivery system for mail sent to and from UI buildings. No postage required. Use inter-campus envelopes. Addresses are available from the University of Iowa directory.

Telephone Equipment & Calls: To call within the university, use only the last five digits of the phone number. To make a call to outside of the university, dial 9 first. Personal long-distance telephone calls must not be charged to the university telephone system.

CAMBUS: Free campus transportation system. For information on routes, pick-up locations and schedules: <http://www.uiowa.edu/~cambus/>.

Vending: CPH Student Commons (GH), West Lawn and Corridor 1 at IREH contain vending areas.

Lunch and Break Rooms: 119 & 233N IREH.

Free Parking: Oakdale all day. Parking fees are charged for the use of the Newton Street parking ramp.

Study Areas: IREH Library (163) and the student computer room (213).

Student Forms: Add Forms, Drop Forms, Plan of Study Forms, and other forms for students are located on the OEH website: http://www.public-health.uiowa.edu/oeh/current_students/forms.html