University of Massachusetts Lowell
UMASS
Learning with Purpose

College of Health Sciences
Department of Public Health

MASTER OF SCIENCE IN WORK ENVIRONMENT

Occupational and Environmental Hygiene

Learn to prevent illness and injury in the workplace. Recognizing, evaluating, controlling and preventing chemical, physical, biological and psychosocial hazards in the work environment are the focus of this field of study. With your master's (or doctoral) degree in OEH, you'll have the tools to not only keep people healthy, but also productive at work. You'll learn to diagnose exposure problems, develop sampling strategies, and collect and measure samples to diagnose environmental risk factors that threaten worker health and safety. You'll also study how to design and implement more sustainable production systems.

Master of Science in Work Environment, Occupational and Environmental Hygiene option is accredited by the Applied Science Accreditation Commission and the Accreditation Board for Engineering and Technology (ABET). The Occupational and Environmental Hygiene program also serves as an excellent preparation for the ABIH exam to become a Certified Industrial Hygienist (CIH). UMass Lowell graduates are particularly competent because, not only are they well-trained in their own chosen specialty, but they also understand how their work fits into the political and social dynamics that effect work environment, environmental quality, and public health.

Graduates find that there is a strong demand for their skill sin private companies and government agencies, and as consultants. Some examples of where our alumni are working:

- Manufacturing
- Hospitals
- Universities
- Insurance companies
- Bio-Pharmaceuticals
- State Department of Public Health, Labor, and Worker's Compensation
- Occupational Safety and Health Administration
- National Institute for Occupational safety and Health (C.D.C)

Qualifications of students who graduate from our program:

- Technical Competence: Demonstrate a high level of technical and scientific competence in the application of the fundamentals of recognition, measurement, control and prevention of occupational and environmental hazards.
- Analytic Competence: Demonstrate the ability to solve complex problems through literature review, exposure assessment and evaluation and data analysis.
- Effective and Ethical Practice: Understanding of regulatory and programmatic requirements for occupational and environmental hygiene. Demonstrate effective oral and written communications with technical and worker audiences, including the development and presentation of effective worker training. Understand ethical responsibilities for the protection of human subjects and the practice of occupational and environmental hygiene.
- Lifelong Learning: Understand the need to engage in life-long learning and undertake appropriate activities to address this need, including professional advancement leading to professional certification.

MASTER OF SCIENCE
Occupational and Environmental Hygiene

Full-time Curriculum Plan (36 credits) *

Public Health Core Courses

PUBH.5030	Toxicology and Health	3 credits
PUBH.5510	Work Environment Policy & Practice	3 credits
PUBH.5750	Introduction to Epidemiology	3 credits
PUBH.6000	Capstone I / Practicum I	3 credits
PUBH.6010	Capstone II / Practicum II	3 credits

Occupational and Environmental Hygiene Option Courses

PUBH.5100	Fundamentals Occupational Environmental Health	3 credits
PUBH.5400	Occupational Safety Engineering	3 credits
PUBH.6140	Evaluation of Work Environment Hazards	3 credits
PUBH.6150	Solutions for Work Environment	3 credits
PUBH.6161	Exposure and Risk Assessments	3 credits
PUBH.6191	Measurement Airborne Contaminants (with Labs)	3 credits

Public Health Electives

PUBH.XXXX Elective I (Choose 1) 3 credits

- *PUBH.5061 - Intro Environmental Health*
- *PUBH.6381 - Methods for Work Analysis*

* Part-time plans of study can also be arranged in consultation with academic advisor. Full-time plans of study that begins in the spring semester will include the same courses, taken in a slightly different order.

Updated 1/4/17