

ENVIRONMENTAL HEALTH SCIENCES

2021-22

Competencies by Degree and Concentration

1. Public Health Practice Degrees

A. MPH: Environmental & Occupational Health

MPH-EOH 1: Explain environmental and occupational health theories and apply them to public health problems.

MPH- EOH 2: Apply risk assessment approaches based on target populations.

MPH- EOH 3: Apply environmental justice principles to community and occupational settings.

MPH- EOH 4: Describe the regulatory policies and agencies that influence environmental and occupational health issues.

MPH- EOH 5: Evaluate the literature concerning environmental factors impacting human health.

2. Academic Public Health Degrees

A. MSPH Environmental & Occupational Health Sciences

MSPH-ENH 1: Review the theories of environmental and occupational health sciences for research.

MSPH-ENH 2: Explain environmental and occupational health concepts and apply them to public health problems.

MSPH-ENH 3: Develop a study, experiment, sampling methodology, analysis or skills to use equipment and perform analytical techniques for environmental and occupational sampling, in an area of specialization in environmental or occupational health sciences.

MSPH-ENH 4: Demonstrate the ability to conduct environmental or occupational health research under the guidance of an environmental or occupational health science mentor.

MSPH-ENH 5: Write a thesis that reports at the minimum the background, research methods, analysis of results, and interpretation and discussion of environmental or occupational health sciences research.

MSPH-ENH 6: Prepare a manuscript for submission to a peer-reviewed journal based on environmental or occupational health research findings.

MSPH-ENH 7: Convey complex information and present research findings in a forum open to the Department of Environmental Health Sciences and other members of the SOPH and UAB.

B. MSPH Industrial Hygiene

MSPH-ENH-IHY 1: Demonstrate knowledge on the scientific principles and fundamentals of industrial hygiene.

MSPH-ENH-IHY 2: Use sampling and analytical methods to conduct occupational exposure assessment

MSPH-ENH-IHY 3: Demonstrate the fundamentals in controlling occupational exposure hazards.

MSPH-ENH-IHY 4: Apply fundamental concepts of industrial hygiene theory to real life practical cases.

MSPH-ENH-IHY 5: Apply the basic regulations and standards of industrial hygiene to real field situations.

MSPH-ENH-IHY 6: Demonstrate the ability to conduct supervised research in an industrial hygiene topic, write and defend a research thesis.

C. General ENH PhD:

PHD-ENH 1: Demonstrate in-depth knowledge and capacity to apply environmental health concepts.

PHD-ENH 2: Conduct a comprehensive review of literature and identify gaps in environmental and occupational health.

PHD-ENH 3: Develop an environmental or occupational health dissertation research proposal with a detailed plan for the method and analysis.

PHD-ENH 4: Communicate, verbally and in written form, to the scientific community stakeholder and the public scientific information on environmental and/or occupational health.

PHD-ENH 5: Develop advanced knowledge on environmental and occupational exposure and the effect on the human body.

PHD-ENH 6: Understand the major environmental and occupational hazards and risk factors including those related to climate change and natural and man-made disasters.

PHD-ENH 7: Understand and apply approaches for assessing, preventing, and controlling environmental and occupational hazards that pose risks to human health and safety.

PHD-ENH 8: Present and defend dissertation research in a public forum.