# ENVIRONMENTAL HEALTH SCIENCES 2023-24

# **Competencies by Degree and Concentration**

#### 1. Public Health Practice Degrees

## A. MPH: Environmental & Occupational Health

**MPH-ENH 1:** Explain environmental health theories and apply them to public health problems.

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

MPH- ENH 3: Apply environmental justice principles to community settings.

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

**MPH- ENH 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:** Perform analytical methods that are used for determining how air and water pollutants impact human health and the environment.

**MSPH-ENH 3:** Design a study, experiment, or apply analytical techniques using equipment and/or software in an area of specialization in environmental or occupational health sciences.

#### **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.

#### C. General EHS PhD:

**EHS PhD 1:** Describe the major environmental and occupational hazards and risk factors impacting human health.

**EHS PhD 2:** Communicate, verbally and in written form, to the scientific community, stakeholder, and the public, scientific information on environmental and/or occupational health.

**EHS PhD 3:** Conduct a comprehensive review of literature and identify gaps in environmental and occupational health.

**EHS Ph 4**: Devise an environmental or occupational health dissertation research proposal with a detailed plan for developing the method and analysis.

EHS PhD 5: Present and defend dissertation research in a public forum.