

## Degree Requirements and Competencies for the MS in Environmental Health Sciences: Applied Individualized Track (*effective summer 2022*)

### Required Coursework

	Credits
<b>DEOHS Common Core</b>	
<b>BIOST 511</b> ( <i>Medical Biometry I, Autumn</i> )	4
<b>EPI 511</b> ( <i>Introduction to Epidemiology, Autumn</i> )	4
<b>ENV H 501</b> ( <i>Foundations of Environmental &amp; Occupational Health, Autumn</i> )	4
<b>ENV H 502</b> ( <i>Assessing &amp; Managing Risks from Human Exposure to Environmental Contaminants, Winter</i> )	4
<b>ENV H 503</b> ( <i>Adverse Health Effects of Environmental and Occupational Toxicants, Autumn</i> )	4
<b>ENV H 580</b> ( <i>Environmental and Occupational Health Sciences Seminar, Autumn/Winter/Spring</i> )	3 x 1 = 3 <sup>1</sup>
<b>Individualized Track</b>	
Student works with faculty adviser to design a course of study tailored to their research interests and career goals. Must include a minimum of 10 credits of ENV H courses.	≥10
<b>Elective Courses</b> <sup>2</sup>	varies
<b>Culminating Experience (Thesis)</b>	
<b>ENV H 598</b> ( <i>Degree Program Project/Portfolio, All Quarters</i> )	3
<b>ENV H 599</b> ( <i>Field Studies, All Quarters</i> )	3
<b>Total Minimum Credits</b>	<b>52</b>

1. Three quarters of ENV H 580 are required for a total of 3 credits.
2. Student works with their faculty adviser to identify additional courses to reach or exceed the total minimum credit requirement. Elective courses can be ENV H courses or courses from other prefixes (e.g., EPI, BIOST, GH, etc.).

### Additional Requirements

- Students in this degree program are required to complete a culminating project.

# **Degree Requirements and Competencies for the MS in Environmental Health Sciences: Applied Individualized Track (*effective summer 2022*)**

## **Degree Competencies**

*Upon completion of this degree program, you will be able to:*

### **School of Public Health -- All MS Students**

- Explain public health history, philosophy and values
- Identify the core functions of public health and the 10 Essential Services
- Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
- List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
- Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
- Explain the critical importance of evidence in advancing public health knowledge
- Explain effects of environmental factors on a population's health
- Explain biological and genetic factors that affect a population's health
- Explain behavioral and psychological factors that affect a population's health
- Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
- Explain how globalization affects global burdens of disease
- Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)
- Recognize the means by which social inequities and racism, generated by power and privilege, undermine health

### **DEOHS -- MS in Environmental Health Sciences: Applied**

- Apply the major components of the environmental and occupational health framework (problem formulation, hazard identification, dose-response assessment, exposure assessment, risk characterization, risk communication, risk management, evaluation, stakeholder engagement, and research) in order to address environmental public health problems experienced in the community or work environment
- Use epidemiological and statistical techniques to describe and analyze environmental and occupational health data
- Identify a current, practical problem in environmental health sciences and collect, integrate and analyze relevant information to produce practical solutions.