

## Requirements for the MS in Applied Occupational Hygiene

| DEOHS Core Requirements             |   |                      |
|-------------------------------------|---|----------------------|
| <b>Choose one:</b>                  |   |                      |
| BIOST 511                           | Medical Biometry I [A] <b>OR</b>                | (4)                  |
| BIOST 517                           | Applied Biostatistics I [A]                     | (4)                  |
| EPI 511                             | Introduction to Epidemiology [A]                | 4                    |
| ENV H 501                           | Foundations of Environmental Health [A]         | 4                    |
| ENV H 505                           | Fundamentals of Env. and Occ. Toxicology [Sp]   | 4                    |
| ENV H 551                           | Human Exposure to Env. Contaminants [W]         | 4                    |
| <b>Choose one:<sup>1</sup></b>      |   |                      |
| ENV H 543                           | Quantitative Microbial Risk Assessment [Sp]     | (3)                  |
| ENV H 572                           | Environmental Risk and Society [A]              | (3)                  |
| ENV H 577                           | Risk Assessment for Env. Health Hazards [A]     | (4)                  |
| ENV H 580                           | Env. & Occupational Health Seminar [A,W,Sp]     | 1+1+1=3 <sup>2</sup> |
| <b>Minimum Credit Subtotal</b>      |   | <b>26</b>            |
| Degree Option Specific Requirements |   |                      |
| ENV H 550                           | Occupational and Environmental Disease [Sp]     | 3                    |
| ENV H 553                           | Env. Exposure Monitoring Methods [W]            | 4                    |
| ENV H 555                           | Instrumental Methods for IH Measurement [W]     | 3                    |
| ENV H 557                           | Exposure Controls [W]                           | 3+1 <sup>3</sup>     |
| ENV H 560                           | Occupational Safety Management [Sp]             | 4                    |
| ENV H 564                           | Recognition of H & S Problems in Industry [A]   | 2                    |
| ENV H 590                           | H & S of Physical Agents in the Workplace [Sp]  | 3                    |
| ENV H 598                           | Degree Program/Project Portfolio [E] <b>AND</b> | 3                    |
| ENV H 599                           | Field Studies (Internship) [E]                  | 3                    |
| <b>Minimum Credit Subtotal</b>      |   | <b>29</b>            |
| <b>Total Minimum Credits =</b>      |   | <b>55</b>            |

1. Students may substitute another 3-credit course for this requirement when appropriate.
2. ENV H 580: Students are required to complete three quarters of this 1-credit course for a total of 3 credits.
3. Students in this degree option are required to take an additional 1-credit ventilation module with ENV H 557.

[A] = Typically offered in autumn quarter  
[W] = Typically offered in winter quarter  
[Sp] = Typically offered in spring quarter  
[S] = Typically offered in summer quarter  
[E] = Available every quarter

# Degree Competencies for the MS in Applied Occupational Hygiene

## SPH/CEPH – Foundational Public Health Knowledge Learning Objectives

### Profession & Science of Public Health

1. Explain public health history, philosophy and values
2. Identify the core functions of public health and the 10 Essential Services
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
6. Explain the critical importance of evidence in advancing public health knowledge

### Factors Related to Human Health

7. Explain the effects of environmental factors on a population's health
8. Explain biological and genetic factors that affect a population's health
9. Explain behavioral and psychological factors that affect a population's health
10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
11. Explain how globalization affects global burdens of disease
12. Explain an ecological perspective on the connections among human health, animal health, and ecosystem health (e.g., One Health)

## DEOHS All Graduate Student Degree Competencies

1. 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.
2. Use epidemiological and statistical techniques to describe and analyze environmental and occupational health data

## DEOHS Degree-Specific Competencies – MS-AOHy

1. Identify and characterize health hazards associated with exposures in the workplace
2. Describe the use and limitations of accepted sampling and analysis methods for chemical, physical and microbiological hazards and quality control measures for *occupational* exposure assessments
3. Identify and describe appropriate exposure controls for workplace hazards
4. Apply industrial hygiene technical knowledge and training in a workplace environment