



2019-20 PROGRAM GUIDE: Master of Public Health – Environmental Systems & Human Health

Information in this document is updated annually. Please refer to the document for the year you entered the program. Student resources, policies, and procedures applicable to all School of Public Health graduate students can be found on the SPH website, www.ohsu-psu-sph.org.

Overview

Director: Tawnya Peterson, PhD

ohsu-psu-sph.org/mph-environmental-systems-human-health

The MPH in Environmental Systems and Human Health (ESHH) program offers public health training for students who would like to investigate and remediate environmental impacts on human health. Believing that a healthy environment is a cornerstone of preventive medicine, the goal of the program is to produce graduates who will be able to analyze relationships between human activities, the environment, and human health. Program emphases include environmental (e.g., climate) change and its effect on human health, environmental pathogens, environmental transport, fate and remediation of chemical contaminants, food web bioaccumulation, wastewater treatment, environmental risk assessment and communication, and social justice issues. Within the program, special attention will be given to mediating and modifying the effects of environmental disruptions on the health of vulnerable populations in a culturally competent, ethical manner.

Program Competencies

- Communicate the relationship between environmental systems and human health, particularly in response to a changing climate.
- Analyze how environmental hazards (chemical, physical and biological) interact with natural and built systems, including the mechanisms of their adverse effects on humans.
- Assess and interpret relevant literature in the area of public health and environmental hazards.
- Evaluate the risk of environmental exposures to human populations through the incorporation of exposure, toxicological, and other relevant data into risk assessment methodology.
- Discuss how federal and state regulatory programs, guidelines and authorities impact environmental and occupational health issues.
- Apply ethical principles that govern the practice of environmental risk assessment, management, and communication.
- Specify approaches for assessing, preventing and controlling environmental and occupational hazards that pose risks to human health and safety.
- Integrate, synthesize and apply theory to practice in the context of a research study, policy consequences, or environmental exposure.
- Explain the general mechanisms of toxicity in eliciting a human health effect in response to various environmental and occupational exposures.



MPH: Environmental Systems & Human Health

| Course Number | Course Title | Credits |
|---|---|-----------|
| Core Required Coursework (22 Credits) | | |
| BSTA 525 | Estimation and Hypothesis Testing for Applied Biostatistics | 4 |
| EPI 512 | Epidemiology I | 4 |
| ESHH 511 | Concepts of Environmental Health | 3 |
| HSMP 574 | Health Systems Organization | 3 |
| PHE 512 | Principles of Health Behavior | 3 |
| Exam | Certified in Public Health Examination | 0; Pass |
| ESHH | Practice Experience | 4 |
| ESHH | Integrative Project | 1 |
| Program Required Coursework (16 Credits) | | |
| UNI 504 | Qualitative Methods for Health Professionals | 2 |
| ESHH 519 | Environmental Health in a Changing World | 3 |
| ESHH 529 | Environmental Toxicology & Risk Assessment | 4 |
| ESHH 521 | Occupational Health | 4 |
| HSMP 573 | Values & Ethics in Health | 3 |
| Commonly taken electives (22 Credits) | | |
| ESHH 512 | Global & Planetary Health Concepts | 3 |
| ESHH 530 | Environmental Chemistry | 4 |
| EPI 513 | Epidemiology II (Methods) | 4 |
| PHE 511 | Foundations of Public Health | 3 |
| PHE 517 | Community Organizing | 3 |
| PHE 519 | Introduction to the Etiology of Disease | 3 |
| PHE 521 | Quantitative Research Design and Analysis | 3 |
| ESM 552 | Environmental Regulation & Non-regulatory Approaches | 3 |
| ESM 570 | Environmental Education | 4 |
| ESM 588 | Environmental Sustainability | 4 |
| PSY 510 | Occupational Safety & Health | 3 |
| PSY 550 | Occupational Health Psychology | 3 |
| PSY 510 | Work and Well-Being | 3 |
| Total Credits | | 60 |



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MPH: Environmental Systems & Human Health Recommended Course Sequencing - Always consult your Faculty Advisor regarding your program of study and course selection to determine the schedule that fits best.

Full-time student sample schedule

| Year 1 | | | |
|--|------------------------------------|--|---------------|
| Fall | Winter | Spring | Summer |
| ESHH 511 Cncpts Environ Hlth (3 cr.) | BSTA 525 Intro to Biostats (4 cr.) | HSMP 574 Hlth Syst Org (3 cr.) | CPH Exam |
| Epi 512 Epidemiology I (4 cr.) | PHE Prin Hlth Behvr (3 cr.) | ESHH 529 Env Tox & Risk Assmnt (4 cr.) | |
| ESHH 519 Environ Hlth Changing World (3 cr.) | ESHH 521 Prin Occ Hlth (4 cr.) | Elective (1-4 cr.) | |
| Year 2 | | | |
| Fall | Winter | Spring | Summer |
| UNI 504 Qual Mthds Hlth (2 cr.) | ESHH Practice Experience (4 cr.) | ESHH Integrative Project (1 cr.) | |
| HSMP 573 Values&Ethics in Hlth (3 cr.) | Elective (1-4 cr.) | Elective (1-4 cr.) | |
| Elective (1-4 cr.) | Elective (1-4 cr.) | Elective (1-4 cr.) | |

Part-time student sample schedule

| Year 1 | | | |
|--|------------------------------------|--|----------------------------------|
| Fall | Winter | Spring | Summer |
| ESHH 511 Cncpts Environ Hlth (3 cr.) | BSTA 525 Intro to Biostats (4 cr.) | HSMP 574 Hlth Syst Org (3 cr.) | CPH Exam |
| Epi 512 Epidemiology I (4 cr.) | PHE Prin Hlth Behvr (3 cr.) | ESHH 529 Env Tox & Risk Assmnt (4 cr.) | |
| Year 2 | | | |
| Fall | Winter | Spring | Summer |
| ESHH 519 Envir Hlth Chang Wrld (3 cr.) | UNI 504 Qual Mthds Hlth (2 cr.) | Elective (1-4 cr.) | CPH Exam |
| HSMP 573 Values&Ethics in Hlth (3 cr.) | ESHH 521 Prin Occ Hlth (4 cr.) | Elective (1-4 cr.) | ESHH Practice Experience (4 cr.) |
| Year 3 | | | |
| Fall | Winter | Spring | Summer |
| Elective (1-4 cr.) | Elective (1-4 cr.) | ESHH Integrative Project (1 cr.) | |
| Elective (1-4 cr.) | Elective (1-4 cr.) | Elective (1-4 cr.) | |



SCHOOL OF PUBLIC HEALTH

Graduate Student Resources, Policies, and Procedures

Policies and procedures applicable to all School of Public Health graduate students can be found on the SPH website, www.ohsu-psu-sph.org. Please review the student policies and procedures listed there, including but not limited to the following sections:

- Advising
- Academic Standing
- Academic Dismissal
- Academic Dishonesty
- Codes of Conduct
- Educational Records Privacy
- Minimum Course Grade Requirements
- Recognition of Prior Earned Credit
- Course Waiver Policy
- Incomplete Coursework
- Course Approvals (Electives)
- Independent Study
- International Travel and Coursework
- Continuous Enrollment
- Leave of Absence
- Withdrawal Policy
- Time Limits
- Grievance Resolution
- Degree and Certificate Conferral

Resources and support services available to SPH graduate students are listed on the SPH website, www.ohsu-psu-sph.org. Please review the resources listed there.