

## **MPH in Environmental and Occupational Health**

### **Academic Year 2016-2017**

### **Program Profile**

Natural environmental processes and human interaction affect the micro and macro environment in which we live, and directly affects or influences health. The MPH in Environmental and Occupational Health Sciences prepares present and future public health scientists and practitioners to assess and evaluate physical, chemical and biological stressors in the environments people live and work, and identify and develop effective intervention and control methodologies. Interaction with a diverse faculty and competency-based curriculum exposes students to sound scientific theory and methodology in several disciplines and integrates their application to the field of environmental and occupational health. Students in this concentration are provided with the unique opportunity to translate knowledge acquired in the classroom and laboratory into practical applications in the real world through participation in faculty research; internships in industry, state or national agencies; and visits to these organizations. In addition to required courses such as environmental data analysis, human health toxicology, and hazard recognition, evaluation and control, coursework can be taken for additional focus in areas such as occupational health practice/industrial hygiene; exposure and risk assessment; environmental epidemiology; global environmental health; policy; and air pollution. For professionals already in the field of environmental and occupational health, this MPH concentration provides students with an excellent opportunity to enhance their knowledge and expertise in specific areas of interest by working alongside faculty researchers and environmental and occupational professionals at the local, state, national and international level. Students in the environmental and occupational health concentration take an average of two years to complete a minimum of 48 semester credit hours to earn the MPH degree.

#### **Environmental and Occupational Health Concentration Competencies**

| Competency Description  |
|---|
| Identify and discuss health, safety, and ecological impacts of environmental agents.                          |
| Recognize and describe factors that modify exposures to environmental hazards.                                |
| Perform the processes of recognizing, evaluating, and controlling hazards.                                    |
| Identify and understand environmental and occupational health policies, regulations and standards/guidelines. |
| Develop, apply and evaluate programs in environmental and occupational health.                                |

## MPH Core Competencies

The Master of Public Health degree program prepares students to address the following core competencies while advancing their knowledge of public health:

| Competency                         | Competency Description  |
|------------------------------------|---|
| Public Health Knowledge & Skills   | The MPH student will apply basic knowledge and skills of the core public health sciences that include: biostatistics, epidemiology, health management and policy, behavioral and community health, and environmental and occupational health, to the prevention of illness and injury and the promotion of population health. |
| Integration of Theory and Practice | The MPH student will demonstrate the effective integration of theory and practice related to public health issues that affect diverse populations, through a thesis or comprehensive examination and a practice experience.   |
| Communication and Informatics      | The MPH student will gather, organize, and manage data and information effectively to address public health issues through oral and written communications to diverse professionals and lay audiences.  |
| Diversity and Culture              | The MPH student will demonstrate the ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.  |
| Professionalism                    | The MPH student will apply ethical principles to the practice of public health in a variety of settings, demonstrating personal integrity while embracing diverse communities.  |

## Master of Public Health: Environmental and Occupational Health 48 Credit Hours Required

| Fall 1    |   | SCH       |
|-----------|---|-----------|
| BACH 5300 | Theoretical Foundations of Individual and Community Health                              | 3         |
| BIOS 5300 | Biostatistics for Public Health   | 3         |
| EPID 5300 | Principles of Epidemiology  | 3         |
| EOHS 5300 | Environmental Health  | 3         |
| Spring 1  |   | <u>12</u> |
| HMAP 5300 | Introduction to Health Management and Policy  | 3         |
| EOHS 5330 | Evaluation and Control of Chemical and Physical Hazards                                 | 3         |
| EOHS 5350 | Medical Toxicology: The Science of Poisons  | 3         |
| BIOS 5310 | Intermediate Biostatistics  | 3         |
| Summer 1  |   |           |
| EOHS 5312 | Food Safety: Farm to Fork   | 3         |
| PHED 5197 | Professional and Academic Development   | 1         |
| Fall 2    |   | <u>4</u>  |
| EOHS 5310 | Evaluation and Control of Environmental Pathogens                                       | 3         |
| EOHS 6340 | Environmental and Health Risk Assessment  | 3         |
| EOHS 5322 | Air Pollution, Climate Change and Sustainability  | 3         |
| Elective* |   | 3         |
| PHED 5000 | Certified in Public Health (CPH) Exam   | 0         |
| Spring 2  |   | <u>12</u> |
| EOHS 5297 | Practice Experience in Public Health (may take in summer 2 if outside of the DFW area?) | 2         |
| EOHS 5324 | Water and Public Health   | 3         |
| Elective* |   | 3         |
| EOHS 5001 | MPH Comprehensive Exam  | 0         |
|           |   | 8         |
|           | <b>Total Degree Hours</b>   | <b>48</b> |

\*Denotes elective. Course must be approved by advisor.

Reviewed and agreed on this date \_\_\_\_\_

SPH Advisor \_\_\_\_\_

Student \_\_\_\_\_