

# ENVIRONMENTAL HEALTH

REV. 2015

## IS ENVIRONMENTAL HEALTH THE RIGHT CHOICE FOR YOU?

### What is environmental health?

According to the World Health Organization environmental health comprises those aspects of human health and disease that are determined by factors in the environment. It also refers to the theory and practice of assessing and controlling factors in the environment that can potentially affect health.

### What is the role of the environmental health practitioner?

Environmental health practitioners (EHPs) help ensure that the vulnerable areas of our environment are protected from accidental or intentional contamination.

The emergence of many new issues and threats, such as food and water security, exposures to hazardous chemicals, building environments, radiation, vectors, biologic and infectious wastes, and terrorism threats, establishes the need for an educated and well-prepared environmental

health workforce.

### Where do environmental health practitioners work?

Jobs can be found in both the public and private sector and can range from hospitals and other health care facilities, to government agencies (i.e., Food and Drug Administration, Environmental Protection Agency, town and community water authorities, private companies such as airlines (food and air quality safety) and laboratories (water quality and ground contamination).

### Is there a demand for environmental health practitioners?

According to the U.S. Department of Labor, there are several crises in the nation right now: toxic waste, hazardous chemical and physical agents and unintentional injuries. There are shortages of qualified professionals dealing with chemicals, toxins, environmental epidemiology and environmental engineering.

### What is the salary range?

Entry level salaries for people with bachelor's degrees range from \$32,000 to \$52,000 depending on related work experience, internships and geographic location.

### What else should I know?

EHPs have vast career opportunities as "generalists" or "specialists". The private sector is creating more and more advisory roles, which suit the "generalist" EHP perfectly, as are many local government agencies (food safety, housing, environmental protection). You could also work your way towards specializing in food safety (ensuring proper preparation, handling and storage), occupational health (ensuring safe work environments), housing (ensuring proper maintenance and installation of fire escapes, smoke alarms, etc) or environmental protection (maintenance of air and water quality and ground contaminants).



*"Environmental health professionals find themselves facing new responsibilities. While their mission has always been to preserve and improve environmental factors for the achievement of optimum health, safety, and well being of the public, the challenges within that mission have expanded to include security and counter-terrorism.*

- National Environmental Health Association

## ENVIRONMENTAL HEALTH

### What are the requirements of the Environmental Health concentration?

Health Science majors must successfully complete the fall semester coursework during their senior year before enrolling for the spring courses in the Environmental Health concentration.

Coursework during the spring semester will provide students with the knowledge to: recognize, identify and control environmental contaminants in the workplace and prevent and prepare for hazardous material incidents and be able to comply with various regulatory agencies.

Required courses in the concentration include:

#### **HAN 470 Occupational Health & Safety Engineering:** Provides fundamentals of occupational safety and health.

Emphasizes safety engineering regulations, codes and practices, safety program administration, recognition of hazards, and implementation of hazard controls. Restricted to students ap-

proved for appropriate senior year track in the Health Science major.

**HAN 474 Industrial Hygiene:** Introduces basic concepts of industrial hygiene. Presents the methodology and procedures that professionals in the field use to identify, measure, and correct hazards in the work environment. Restricted to students approved for appropriate senior year track in the Health Science major.

**HAN 475 Fundamentals of Environmental Health:** Introduces the key areas of environmental health. Utilizes a population health perspective. Emphasizes core concepts in environmental health (i.e. environmental epidemiology, environmental toxicology, environmental policy and regulation); agents of environmental diseases (i.e. microbial agents, ionizing and nonionizing radiation); and applications and domains of environmental health (i.e. water and air quality, food safety, waste disposal, occupational health, and injuries). Restricted to

students approved for appropriate senior year track in the Health Science major.

**HAN 476 Hazardous Materials, Emergency response and Environmental Auditing:** Concentrates on the nature of hazardous materials and how they are handled in the workplace. Presents the fundamentals of emergency response planning and how to perform environmental audits. Restricted to students approved for appropriate senior year track in the Health Science major.

**HAN 478 Internship in Environmental Health:** A 90 hour internship experience provides real-time work experience and opportunity for students to apply knowledge and skills learned in environmental health concentration courses. Restricted to students approved for appropriate senior year track in the Health Science major.

To declare Health Science as your major, you are **required** to attend an Advising Workshop. To schedule an appointment, please email Jennifer Jimenez at [jennifer.jimenez.1@stonybrook.edu](mailto:jennifer.jimenez.1@stonybrook.edu).

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**OR VISIT OUR WEBSITE AT:**

<http://healthtechnology.stonybrookmedicine.edu/programs/hs>

**HOW TO BECOME A HEALTH SCIENCE STUDENT**

Students can declare the Health Science major at any time during their academic career. All major courses are taken during the senior year. In order to begin your senior year courses in the major, you must have:

- \* a G.P.A. of at least 2.0 and have successfully completed 91 credits and have met all D.E.C/S.B.C requirements
- \* except TECH SBC requirement which will be satisfied during the senior year
- \* at least 16 credits in sciences, which must include HAN 200 and HAN 202 sequence, or equivalent sequence (ask advisor for information)
- \* 21 credits of related electives, which must include HAN 251 and HAN 312
- \* 10 upper division credits.

Successful completion of the following courses during the fall semester of your senior year is required:

- Health Care Issues**
- Professional Ethics**
- Communication Skills**
- Professional Writing**
- Health Informatics**



**PLEASE VISIT THE FOLLOWING WEBSITE FOR ADDITIONAL INFORMATION:**

**Professional Organizations:**

- American Society of Safety Engineers  
[www.asse.org](http://www.asse.org)
- Environmental Protection Agency  
[www.epa.gov](http://www.epa.gov)
- National Institute of Environmental Health Sciences  
[www.niehs.gov](http://www.niehs.gov)

**Occupational and Employment Information**

- [www.labor.state.ny.us](http://www.labor.state.ny.us)
- [www.dol.gov](http://www.dol.gov)
- [www.Neha.org/CareerOp.html](http://www.Neha.org/CareerOp.html)
- [www.salary.com](http://www.salary.com)
- [www.salary.monster.com](http://www.salary.monster.com)