

Montgomery County Community College  
PBH 202  
Environmental Health  
3-3-0

**COURSE DESCRIPTION:**

This course examines the impact of the environment on human health and explores strategies used by public health professionals to minimize negative environmental effects. Environmental health hazards, exposure pathways and control, and the influence of climate change on individual and population health are discussed.

**REQUISITES:***Previous Course Requirements*

- BIO 115 Environmental Biology
- PBH 102 Communication in Public Health

*Concurrent Course Requirements*

None.

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Examine the physical, chemical, and biological factors external to an individual that impact public health.	Lecture Text Book Readings Online Resources Videos Class Discussion Written Assignments Student Presentations	Written Examinations Student Projects and Presentations Case Study
2. Propose methods of preventing and controlling disease, injury, and disability related to the interactions between individuals and their environment.	Lecture Text Book Readings Case Studies Class Discussion Written Assignments Student Presentations	Written Examinations Student Project and Presentation Case Study
3. Analyze environmental justice and global health issues within the context of public health responsibility.	Lecture Case Studies Text Book Readings Online Resources Videos Class Discussion Written Assignments Student Presentations	Written Examinations Student Project and Presentation Case Study

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
4. Apply the commonly used methodologies including risk assessment, risk management.	Lecture Class Discussion Written Assignments Journal Article Reviews Student Presentations	Written Examinations Student Project and Presentation Case Study
5. Discuss the common roles found within the field of environmental health.	Lecture Class Discussion Online Resources Videos	Student Presentation

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of the students will meet or exceed outcome criteria.*

#### SEQUENCE OF TOPICS:

- I. Basic Principles and Methodologies
  - A. Definitions and historical perspectives
  - B. Environment and health
  - C. Health hazards – toxicology
  - D. Risk assessment and management
  - E. Health data and epidemiology
  - F. Environmental health regulations and compliance
  
- II. Exposure Pathways and Control
  - A. Indoor and outdoor air quality and health
  - B. Water quality and health
  - C. Food and health
  - D. Solid and hazardous wastes
  - E. Vector-borne diseases
  - F. Noise and health
  
- III. Global Environmental Health Issues in the 21<sup>st</sup> Century
  - A. Built Environment and human populations
  - B. Energy and sustainability
  - C. Occupational health and hygiene
  - D. Climate change and human health
  - E. Environmental justice and global health
  - F. Protecting public health and the environment

LEARNING MATERIALS:

Bradley, N., Harrison, H., Hodgson, G., Kamanyire, R., Kibble, A., & Murray, V. (2014). *Essentials of Environmental Public Health Science: A Handbook for Field Professionals*. Oxford University Press

Other readings and/or films are also required and are selected each semester at the discretion of the instructor.

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

COURSE APPROVAL:

Prepared By: Natasha A. Patterson, MPH

Date: 2/16/2015

VPAA/Provost or designee Compliance Verification:

Victoria L. Bastecki-Perez, Ed.D

Date: 6/16/2015

*This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.*