

Course at a Glance

Course Title: Environmental Health Sciences

Course Number: HSC 4933

Dept: EOH

Credits: 3

Traditional Section: 314

Reference Number: 93170

Sponsored Institute Section:

Reference Number:

State Employee Section:

Reference Number:

Format of content presentation, activities and/or instructional methods:

The course will be a combination of lectures and outside readings with online discussion. Active participation in online discussion forum is expected. Assignments and readings may be made available through Blackboard. Blackboard is a University of South Florida supported web-based program that allows students to access course materials from any computer terminal linked to the web. Only students officially enrolled in the course may obtain access to Blackboard. Students must have a USF NetID to access Blackboard. All students are expected to read all course materials, perform all class activities, meet all course requirements, and take all examinations within defined dates.

Instructor Name: Marie Bourgeois, PhD MPH

Instructor Email: mbourgeo@health.usf.edu

Day of Class (this is the day of the week new information is made available):

☒ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday

How is the course content organized?

☐ by Session ☐ by Week ☐ by Unit ☒ by Module

Other: Describe here

What is the length of one of your lessons/modules/units?

☐ One Day ☒ 5 Day Work Week ☐ 7 Day Week ☐ 2 Weeks ☐ 3 Weeks ☐ 4 Weeks

How many lessons/modules/units are there in your entire course?

Number: 15

More Details about time/day content is available or about how the content is organized:

Discussion Posts and Module Activities are due by 11:59 PM Saturday of the relevant module. Other assignments (term paper, group project) will have specified due dates.

Course Description:

This is designed as a survey course to introduce students to basic environmental health science topics. Major environmental health problems including water quality, wastewater, trace elements in the environment, municipal and hazardous waste, food protection, vector control, air quality exposure to toxic chemicals, environmental justice, regulations, and safety in the work place are discussed. Sources of these factors, methods of identification, recognition, evaluation and regulatory framework control are discussed. Historical human impact on the environment and efforts to ameliorate future harm through sustainability and renewable resources are also discussed. The format of this course will consist of lecture/discussion of course materials, midterm and final examinations, mandatory discussion thread posts, term paper and a group student presentation related to the course content.

Textbook and Ordering materials:***Required Text:***

Moeller, Dade, Environmental Health, 4th Edition (2011)
Harvard University Press, ISBN: 0674047400

Recommended Text (optional):

How to Order:

A link will be provided to the HSC bookstore online order form.

Other Required Materials:

Supplemental Readings will be posted in blackboard

List the topics covered in your course:

1. Identify and discuss current environmental health issues (Biological, chemical and physical) and environmental contaminants.
2. Discuss environmental health hazards, including microorganisms in the environment, in the context of recent events.
3. Identify and discuss the physical, chemical, and biological hazards associated with water pollution, as well as the importance of water quality related to contamination, protection, and monitoring of water supplies.
4. Identify and discuss health hazards associated with methods of collection, treatment, disposal and recycling of human waste and bio-solids, solid and hazardous waste, infectious waste and describe the health hazards associated with improper management of these wastes.
5. Identify and discuss health risks associated with indoor and outdoor air pollutions and methods of hazard control.
6. Identify and discuss food-borne pathogens and the importance of the protection of food sources. Acute and chronic effects of food additives and pesticide residues.
7. Identify and discuss adverse health effects in occupational settings due to exposure to dust, gases, vapor fumes, noise, and their mitigation and control and discuss the legal, regulatory processes to provide workers with a safe workplace. Define radioactive particles including Gamma, Beta and Alpha, discuss the health effects and methods of protection and control.
8. Define global environmental health issues, especially those facing developing countries, such as water supply, waste disposal, pathogen issues, wetland management, and the misuse of agricultural pesticides.
9. Classify toxic chemicals in the environment; explain their beneficial and detrimental effects, their persistence, distribution, mechanism of toxicity, dose-response time- exposure, genetic factors affecting response to toxic chemicals, disrupting properties and transformation in the environment. Discuss pesticides and hazardous waste.
10. Discuss federal, local and international legal, regulatory and policy aspects of environmental assessment, evaluation and control, including risk assessment, management and communication.

11. Identify and describe vectors of public health importance, including insects and rodents; discuss transmission and control; identify breeding and control methods.
12. Identify emerging environmental health issues on local, regional and global levels.

What types of assessments and activities are incorporated into your course?

Exams, Term Papers, Group Project, Discussions

What do you expect out of the students taking your course? [What do they have to do to be successful in your course?]

Students are required to log in once a week, read the textbook and assigned articles, listen to lectures and participate in the discussion forum.

Required Dates to be online or on campus (if applicable):

(for example: an exam is only available on one day for a 4 hour period)

- | | | | | | |
|-------------------|----------|---------------|-----|----------------|---------------------|
| 1. Date: 10/18/12 | Between: | Time: 6:00 AM | and | Time: 10:00 PM | Online |
| 2. Date: 12/6/12 | Between: | Time: 6:00 AM | and | Time: 10:00 PM | Online |
| 3. Date: 1/1/05 | Between: | Time: 6:00 PM | and | Time: 9:00 PM | Online or On Campus |
| 4. Date: 1/1/05 | Between: | Time: 6:00 PM | and | Time: 9:00 PM | Online or On Campus |
| 5. Date: 1/1/05 | Between: | Time: 6:00 PM | and | Time: 9:00 PM | Online or On Campus |
| 6. Date: 1/1/05 | Between: | Time: 6:00 PM | and | Time: 9:00 PM | Online or On Campus |

Who should students contact for more information about your course?

Name: Marie Bourgeois

Contact Info: 813 974 6660

Are there any other contacts? If so, please list below

Note: For problems accessing the course materials and other computer technical problems, click the **Tech Assistance** button in your course website and fill out a "Technical Problem Report Form". Tech Assistance button links to the Technical Assistance page of the Office of Educational Technology & Assessment website at: <http://health.usf.edu/publichealth/eta/techsupport.html>. Students can also receive assistance via telephone at 813-974-6666, Mon-Fri 8:30am-5pm, or via email at eta@health.usf.edu.

Technology Requirements (e.g. software or hardware):

Are there any specific technology requirements (hardware and software) for your course?

no

Note: These are in addition to the basic technology requirements for all online courses.

Please Note: The information on this document is subject to change. The course instructor has the right to change any information posted in this document. Students should check the official course syllabus released during the first week of classes for any updates to this document.