KANSAS STATE UNIVERSITY

Course Syllabus

MPH 802 / DMP 802

Environmental Health

Instruction: Dr. Thu Annelise Nguyen
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Office Hours: By appointment

Meeting Time: This is a three-credit graduate-level course consisting of a 3-hour meeting per week.

Lectures: Wednesday from 9:00 a.m. to 11:45 a.m. in Coles Hall, Room 343

The first class meets on Wednesday, August 26, 2015; last class meets on Wednesday, December 9, 2015

Course Description: This course provides a broad overview of some of the most important and current challenges to human health from the environment as well as teaching the basic concepts and skills to assess, control, and prevent these challenges in environmental health. Topics of lectures include agent-host-environment triad and its impact as a determinant of population health. Students are introduced to factors that impact on air, water, land and climate in the macro environment, in specific contexts such as homes, workplaces, and consumer products, and in natural and man-made disasters. Students will be exposed to professional practice of environmental sciences, epidemiology, toxicology, occupational health and industrial hygiene, and consumer health and safety. Topics include the methods for defining environmental contamination; identifying contaminants, pathogens and toxins; assessing risks and causality; determining health impact; ameliorating hazards; and protecting the population through waste management, regulatory programs, environmental inspections, food and product safety, and environmental policy. Includes interaction with professionals in public health practice.

Course Objectives: By completing the class assignments, through participation and by completing the readings, the student will be able to:

Learning Outcomes	**Course Objectives**
Recognize major public health issues for populations on a social, community, and global scale.	Describe environmental risk factors that affect both personal and population health. Recognize the importance of key events and milestones in the history and development environmental health. Identify pesticides and other organic compounds, and how they influence population health.
Describe multidisciplinary and ecological public health issues and concerns.	Gain knowledge and understanding of the multiple determinants of health with emphasis on impacts of environmental contaminants.
Discuss lifestyle behaviors that promote individual and population health and well-being.	Describe risk factors and modes of transmission for diseases that result from pollutants in the environment. Gain awareness of lifestyle behaviors that can reduce exposure to environmental contaminants.
Apply multidisciplinary strategies and interventions in addressing public health issues.	Outline approaches for assessing and controlling environmental hazards that affect population health. Discuss the interconnectedness among the physical, social, and environmental aspects of community health. Describe how the methods of epidemiology and surveillance are used to safeguard the population's health against hazards in air, water, food, and solid/liquid waste. Gain knowledge of how environmental health sciences, epidemiology and toxicology can help address and protect safety of populations, including consumers and workers.
Apply concepts of planning and management in public health programs.	Identify key laws and regulations for addressing issues related to environmental health. Explain how the organizational structure, financing, and delivery of personal health care and environmental health services impact population health.
Integrate and apply knowledge, skills, and principles for health improvement.	Assess the source and quality of environmental health information and data, as related to individual and population health.

Course content:

Week	Date	Time	Topic	Instructor	Assignment
1.	8/26	9:00-10:15	Introduction	Dr. Nguyen	---
		10:30-11:45	Env. Health Examples	Dr. Nguyen	
2.	9/2	9:00-10:15	Env. Epidemiology	Guest Speaker	Ch.1
		10:30-11:45	Class discussion	from CDC	
3.	9/9	9:00-10:15	Toxins in the Env.	Dr. Nguyen	Quiz 1
		10:30-11:45	Class Discussion	Dr. Nguyen	
4.	9/16	9:00-10:15	Env. Policy and Regulation	Guest Speaker	Ch.2
		10:30-11:45	Class Discussion	from EPA	
5.	9/23	9:00-10:15	Agents of Env. Disease:	Guest Speaker	Ch.3
			Zoonotic and water-borne disease	from USDA	
		10:30-11:45	Class Discussion		
6.	9/30	9:00-10:15	Agents of environmental disease:	Dr. Nguyen	Quiz 2
			Toxic metals and elements		Ch.5
		10:30-11:45	Class Discussion	Dr. Nguyen	
7.	10/7	9:00-10:15	Agents of Env. Disease:	Dr. Nguyen	Ch.5
			Pesticides and other organic compounds		
		10:30-11:45	Class Discussion		
8.	10/14	9:00-10:15	Mid-semester examination	---	
		10:30-11:45	Case Study Env. Diseases	Dr. Nguyen	
9.	10/21	9:00-10:15	Agents of Env. Disease:	Mr. Ron Bridges	Quiz 3
			Ionizing & Non-ionizing Radiation		Ch.4
		10:30-11:45	Class Discussion		
10.	10/28	9:00-10:15	Air/Water Quality; Solid/Liquid Waste	Guest Speaker	Ch.7
		10:30-11:45	Class Discussion		
11.	11/4	9:00-10:15	Food Safety	Dr. Nutsch	Ch.6
		10:30-11:45	Class Discussion		
12.	11/11	9:00-10:15	Occupational Health	Guest Speaker	Ch.5
		10:30-11:45	Class Discussion	from KU Medical Center	
13.	11/18	9:00-10:15	Managing Env. Risks to Promote	Guest Speaker	Quiz 4
			Population Health		Ch.4
		10:30-11:45	Class Discussion		
14.	12/2	9:00-10:15	Case Study of Health and	Guest Speaker	
			Occupation Safety	from JCDHE	
		10:30-11:45	Class Discussion		
15.	12/9	9:00-10:15	Student Presentation	---	
		10:30-11:45	Student Presentation	---	
16.	12/17	Thursday	Final Exam		

Prerequisites: None

Course Grades: The graded assignments and the percentages of the student's grade they will constitute are the following:

Quizzes (four)	20 %
Mid-semester examination	30 %
Class participation	10 %

	Presentation	10%
	Final examination	30%

Symbol assignment: 90-100%: A; 75-89%: B; 65-74%: C; 55-64%: D; <55%: F

Required Text: Author: Maxwell
Title: Understanding Environmental Health, Second Edition
ISBN: 9781449665371

A listing with readings from published papers will be provided in class or online.

Course Notices:

Attendance is required at all classes and only university-approved excuses will be accepted.

No make-up examination will be provided for students who miss the examination due to non-university excused absence. Student missing an examination for a non-university excused absence will received 0 points.

It is both professional and courteous to come to class on time. Entering the classroom after the beginning of class is disruptive to your classmates. All cellular telephones and mobile pagers must be turned off during class time. Text messaging or playing computer games during class is unacceptable behavior.

Scholastic dishonesty, in any form, will not be tolerated. This means no cheating of any kind. Scholastic dishonesty includes, but is not limited to, looking at the exam sheet of a classmate (with or without their permission).
All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article VI, Section 3, number 2.

Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reached via the following URL: www.ksu.edu/honor. A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

Any student with a disability who needs assistance in this course should contact Disability Support Services (http://www.k-state.edu/dss/), and inform the instructors of arrangements that must be made to accommodate special needs.