



College of Health Sciences  
Department of Population Health  
Syllabus: Environmental Health  
HLTH 4390-Section 2, Fall 2018



## **COURSE INFORMATION**

*Location & Meeting Time:* CHSS 242-B, Thursday 2:00-4:50pm  
*Instructor:* Dr. Dhitinut Ratnapradipa (Dr. DT)  
*Contact Information:* Tel: (936) 294-2734; Email: [dxr070@shsu.edu](mailto:dxr070@shsu.edu)  
*Office location & hours:* CHSS 432 E; T/W 11:30-1:30pm, TH 12:00-2:00pm

## **COURSE DESCRIPTION**

Environmental health impacts our daily life. This course leads students through a critical review and examination of the impact of the physical, biological, and biochemical environment on human health. The primary goal of this class is to provide a broad overview of key areas of environmental health as a public health discipline. Topics include ecosystem balance, population dynamics, sanitation, toxic substances, environmental diseases, and environmental pollution/ hazards.

The course should contribute to your understanding of the impact of environmental concerns in your role as a future public health practitioner. Using the perspectives of population and community growth, the goals of this course are threefold:

1. to understand the core principles and concepts of environmental health disciplines;
2. to understand the environmental factors impacting human and ecological health; and
3. to explore environmental health tools (epidemiology, toxicology, policy and regulation) through their application to current issues of concern to government agencies.

## **COURSE TEXTBOOK/REQUIREMENT**

Friis, Robert, H. (2012). *Essentials of Environmental Health*. 2<sup>nd</sup> Edition. Jones and Bartlett Learning, LLC. Sudbury, MA, ISBN: 978-0-7637-7890-3

Required documentary viewing:

1. *Gasland* (2010), directed by Josh Fox.
2. *Food, Inc.* (2008), directed by Robert Kenner.

## **COURSE OBJECTIVES**

### *Knowledge:*

- define and discuss the history of environmental health;
- gain a basic knowledge of science that is fundamental to understanding environmental health issues;
- discuss the association between population growth and dissemination of environmental pollutants;
- describe methods used in epidemiology and toxicology to assess environmental exposures.

### *Abilities:*

- analyze policies, regulations, and guidelines that have been developed to manage health risks associated with exposures to environmental hazards;

- advocate effectively using scientific and non-scientific aspects of environmental health practice;
- identify chemical, physical, and microbial agents that originate in the environment and can impact human health;

**Skills:**

- identify challenges and propose potential ways to deal with them in environmental health practice, with particular attention to issues of environmental justice and equity; and

**Behaviors:**

- take steps in their personal life and in the community to reduce environmental hazards.

**COURSE EVALUATION**

<b>Evaluation Criteria</b>	<b>Available Points</b>
1). Class Participation <ul style="list-style-type: none"> <li>• Syllabus Review (5 pts)</li> <li>• Class attendance</li> <li>• Class activities</li> </ul>	5 5 5
2). 4 Quizzes (5 pts each quiz)	20
3). <i>Gasland</i> (2010) documentary	20
4). Environmental health in the news	20
5). Final Exam	25
<b>TOTAL</b>	<b>100</b>

**GRADING SCALE**

90%-100% = A, 80%-89.9% = B, 70%-79.9% = C, 60%-69.9% = D, <60% = F

***Final grades will NOT be rounded.***

**ASSIGNMENT DESCRIPTIONS**

**1. Class Participation (15 points):** Class participation is *required* and accounts for 15% of your final grade. Active class participation is an integral part of your learning experience and will be assessed as follows:

- **Syllabus Review (5 pts; due 10:00 pm on Jan 31<sup>st</sup>):** Have you thoroughly reviewed the syllabus and acknowledged its contents? The syllabus is an important tool for guiding you through the course, assignments, due dates/times, and expectations. Therefore, students will be expected to complete & submit with electronic signature an acknowledgment on **Blackboard** that they are familiar with the contents of the syllabus.
- **Attendance (5 pts):** How often do you attend class? Although you are required to provide proof regarding your reason for absence (see Attendance Policy below), you are allowed to miss one class without any point deductions. Thereafter, your attendance points will decrease based on the number of class hours missed (absences, tardiness, leaving early). Students missing 5 or more classes will receive a “0” for this portion of the grade.
- **Class activities (5 pts):** Have you completed the in-class activities? In-class activities may include sample calculations, media critique, discussing research and policy implications, etc. In-class exercises are due during the class session in which they are introduced. Students will complete the exercises individually or in small groups before the class discusses the answers. Make sure to include your name on in-class submissions to receive credit.

**2. Pop-Quizzes (4 quizzes, worth 5 pts each):** Quizzes will be used to assess your understanding of readings and lecture materials. Quizzes will be timed and will not be rescheduled.

**3. *Food, Inc. (2008)* Written Response (20 pts, due Feb 28<sup>th</sup>):** Media plays an important role in public perceptions of environmental health. Students will be required to view 2 documentaries but are only required to submit a written review of *Food, Inc. (2008)*. Both movies are available from the library (or rented from a movie outlet). **BE AWARE** that this is not a summary of the movie. You do NOT need to include an introduction or overview of the movie, just respond to the items listed below as bulleted lists or short answer (no more than 1 paragraph per item). Your submission should be no more than 2 pages.

1. *Using bullet points*, list at least 5 core areas of environmental health addressed in the documentary. Provide an example of how each core area was addressed in the film (10 pts).
2. Referring to Ch. 4 of your text, *use bullet points* to list 5 major US environmental health laws, and provide an example of each from the film (10 pts).

**4. Environmental Health (EH) in the News (20 pts, due per sign-up on Feb 1<sup>st</sup>):** Public awareness of environmental health issues plays an important role in awareness, risk reduction, and policy responses. Students will find a current (within the past 12 months) news article about an environmental health topic and prepare a brief written summary and 10-minute class presentation.

On Feb 1<sup>st</sup>, students will sign up for a topic with associated due date (first come, first served for choice of topics/dates). This assignment has three components.

- (1) *One week prior to the assigned presentation date*, students will submit a 2-page written analysis with proper APA citation (10 pts), and
- (2) attach a hard copy of the EH news article (5 pts).
- (3) *On the assigned presentation date*, students should briefly present the EH news article to the class, for 10 mins. (5 pts).

The written analysis should serve as talking points for your presentation and should address the following:

- Summarize the environmental health news report. (What was the pollutant, contaminant, exposure, and/or hazard? Who was or might be affected? When and where did the exposure occur? Is any person/agency/industry responsible for the hazard?) (3 pts)
- Highlight any additional factors that may be of relevance to readers (such as the credibility of the reporting agency or of their sources, potential bias, controversy surrounding the issue, scientific uncertainty, limitations, etc.) (2 pts)
- Why is this environmental health news report important? (2 pts)
- Who is impacted by this environmental health news story? How? Why? (2 pts)
- Proper APA citation (1pts)

Students are encouraged to examine a wide range of sources to find environmental health relevant stories of interest. Suggested sources include, but are not limited to: local or national newspapers, news outlets (such as Reuters and Associated Press), scholarly and governmental environmental health web sites such as EPA and NIEHS, and online clearinghouses.

**5. Final Exam (25 points, Tuesday May 8<sup>th</sup> from 3:30-5:30 pm in the classroom):** This is administered per the university final exam schedule. The final exam will be comprehensive and will consist of matching, short-answer, multiple choice, True/False, and/or essay question.

## **COURSE POLICIES**

- **Grade Policy:** Feedback on assignments is intended to help students assess their progress in the course and to provide constructive input for future submissions. As such, prompt grading of assignments is important. For in-class activities and quizzes, I will make every effort to have them graded and available for in-class review within a week. For larger assignments (papers and presentations), I will try to have them available for review within 2 weeks. Assignments will be available for student review during the class in which they are returned, but **MUST** be returned to the instructor during that class period. The instructor will retain the submissions throughout the semester. Unless otherwise specified, students have **1 week** from the day an assignment/quiz/exam is returned to the class to request a review of the grade; grades will not be adjusted beyond this time. When a grade is reviewed, I reserve the right to review the entire assignment/exam/ quiz and adjust points as appropriate. Final grades will NOT be rounded. Students should be familiar with university grading policy.
- **Attendance:** Regular and punctual class attendance is expected of each student at SHSU. Students are expected to sign the attendance sheet for each session within the first 10 minutes of class. Students are expected to attend *all class sessions* **unless permission is given by the instructor in advance to miss a class.** If you expect to miss a session, please discuss this with the instructor *before* the day of the class. All assignments are due on the scheduled date. In rare circumstances (e.g., personal illness, accident, death in one's family), absences will be excused after the fact. Documentation may be required. Be advised that missing more than 3 hours of class may adversely impact your grade. If you miss more than 40% of class hours, it is strongly suggested that you drop/retake the course.
- **Late Assignment Submissions:** Assignments are to be completed by the specified due date and time. **All assignments are to be submitted via Blackboard.** Submissions sent via email will not be accepted. Because we may discuss answers in class, **late submissions will not be accepted unless permission to turn in late is given by the instructor in advance.** In rare circumstances (e.g., medical or family emergency), proof of the extenuating circumstance may be required to allow for exceptions. Technology problems are not a valid excuse for late submissions, so you are advised to prepare your assignments well before the deadline. Be advised that **missing assignment submission deadlines will negatively impact your grade.** Any assignment turned in after the class in which it is due is considered late. Assignments submitted within 24 hours of the due date/time will have the grade reduced by 25%. Submissions 24-48 hours after the due date will have the grade reduced by 50%. Any assignment more than 48 hours late will be recorded as "0" in the grade book.
- **Assignment formatting:** Written documents should be typed in 12-point, single-spaced, Times New Roman font with 1" margins and submitted ONLY as a WORD (.doc or .docx) or PDF (.pdf) document. Do NOT submit documents from google drive. Include a *header* with your name, course/section number, name of assignment, and date located at the top right side of the page. Include a *footer* with page numbering. An assignment template will be posted online for your reference. Failure to properly format submissions will result in a 10% deduction. **Submissions without names will not be graded.**

## **SHSU POLICIES**

### **ATTENDANCE**

SHSU views class attendance as the responsibility of individual students. The university attendance policy (AP 800401) is located at: <http://www.shsu.edu/dotAsset/b719129b-9593-424f-9d5a-920e2eda6890.pdf> The student absence notification policy (for emergency situations) is located at <http://www.shsu.edu/dept/dean-of-students/absence.html>

**THE POLICY FOR RELIGIOUS HOLY DAY OBSERVANCES** ( AP 861001) can be found at: <http://catalog.shsu.edu/archives/2016-2017/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/scholastic-requirements/scholastic-requirements.pdf> A more comprehensive list of university scholastic requirements can be found at <http://undergraduate-catalog-2014-2016.shsu.edu/home/scholastic-requirements.html>

### **USE OF TELEPHONES AND TEXT MESSENGERS IN ACEDMIC CLASSROOMS AND FACILITIES (AP 100728)**

This policy will be enforced and viewed at: <http://www.shsu.edu/dotAsset/6d35c9c9-e3e9-4695-a1a1-11951b88bc63.pdf>

### **ACADEMIC GRIEVANCE PROCEDURES FOR STUDENTS (AP 810213)**

The purpose of this academic policy statement is to provide for the resolution of student academic grievances in a prompt and equitable manner. For further information or need more information please visit: <http://www.shsu.edu/dotAsset/0bb1346f-b8d6-4486-9290-dba24123d0d8.pdf>

### **STUDENT WITH DISABILITIES (AP 811006)**

Students with disabilities that may adversely affect their work in this class should register with the SHSU Counseling Center. This is required if you request an accommodation. Students may request help with academically related problems by calling (936) 294-3512 or visit: <http://www.shsu.edu/dept/disability/> You should also notify your instructor as soon as possible.

### **ACADEMIC DISHONESTY (AP 810213)**

According to Sam Houston State University's Academic Dishonesty statement, "*All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom.*"

Any students found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. Students are encouraged to be familiar with the full policy by reviewing "Code of Student Conduct and discipline" at <http://online.shsu.edu/campus/policies/academic-integrity.html>

#### **- PLAGIARISM**

Plagiarize is the leading form of academic dishonesty. Students are responsible for knowing what plagiarism is and how to avoid it. For more information, please be familiar with <http://www.shsu.edu/dept/dean-of-students/documents/2016-2018%20Student%20Guidelines.pdf>

### **TITLE IX**

Title IX of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. For more information please visit: <http://www.shsu.edu/titleix/>

**AFFIRMATIVE ACTION & EQUAL OPPORTUNITY**

SHSU is an Equal Opportunity/ Affirmative Action Institute

**FAMILY EDUCATION RIGHTS AND PRIVACY ACT (FERPA)**

Be advised that by registering for this course, your name and SHSU assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course, you acknowledge your understanding of this policy.

**WRITING CENTER:** <http://www.shsu.edu/centers/academic-success-center/writing/>

**DISCLIMER:**

This syllabus is representative of materiel that will be covered in this class, and is not a contract between the student and the institution. It is subject to change and the change will be communicated via email, in-class announcements or posted as announcements. If you have any problem related to this course, please feel free to discuss them with the instructor.

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**TENTATIVE COURSE SCHEDULE FOR HLTH 4390-02, SPRING SEMESTER 2018**

Week	Topic	Assignment Reminders	Required Readings
01/18	Introduction & Overview of Environmental Health	Syllabus acknowledge due 1/31	Ch 1
01/25	Environmental Epidemiology	-----	Ch 2
02/01	Environmental Toxicology	Sign-up for topic presentation today	Ch 3; Assigned articles
02/08	Environmental Health Policy & Regulation	-----	Ch 4; Assigned articles
02/15	Toxic Metals & Elements	-----	Ch 6
02/22	Pests, Vector-borne disease, Pesticides	<i>Food, Inc.</i> paper due 2/28	Ch 5, 7
03/01	Water Quality	Student presentations	Ch 9
03/08	Emergency Preparedness	Student presentations	Assigned articles
03/15	<b>Spring break</b>		
03/22	Radiation	Student presentations	Ch 8
03/29	Air quality	Student presentations	Ch 10
04/05	Food safety	Student presentations	Ch 11
04/12	Waste management	Student presentations	Ch 12; Assigned Articles
04/19	Occupational Health & Injury Control	Student presentations	Ch 13 & 14
04/26	Environmental Health Justice	Student Presentations	Ch 14; Assigned Articles
05/03	Review	Student Presentations	
05/8	Final Exam in the classroom	3:30-5:30PM	-----