

COURSE SYLLABUS
OEH 5013
ENVIRONMENTAL HEALTH (ONLINE CORE COURSE)

Semester: Fall 2016
Class Hours: Online, expect 3 contact hours per week
Class Location: Desire2Learn (<http://learn.ouhsc.edu>)
Instructor: Jun Wang, Ph.D., P.E.
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TA: Doga Karyaldiz (Doga-Karyaldiz@ouhsc.edu)
TA Office Hours: CHB 435A (Tuesday, 2-4 pm)

Course Description

The purpose of the class is to introduce public health students to the field of environmental health, through a broad understanding of current health issues related to environmental factors. Students will be able to identify the causes and methodological approaches in the global health context. This core course will give an overview for students interested in studying environmental pollution, exposure, risk, toxicology, etc. and prepare them to acquire certifications and further their careers in public health. Topics being discussed in the class include specific diseases, populations, toxicants, risks, and occupational hazards.

Course Materials

Required Textbook:

Essentials of Environmental Health (second edition), by Robert H. Friis

ISBN: 978-0763778903

There will be two class covered only in the online lectures, not in the book. (Weeks of 8 & 14).

Environmental Health News:

The world is changing every day, so does Environmental Health. Start a subscription to the online journal Environmental Health News to keep up with the most up-to-date knowledge (<http://www.environmentalhealthnews.org/>).

Optional Textbook: (for hardcore environmental health students)

Environmental Health: from Global to Local (second edition), by Howard Frumkin

ISBN: 978-0470404874

Understanding Environmental Health (second edition), by Nancy Irwin Maxwell

ISBN: 978-1449665371

Journal Recommended:

Environmental Health Perspective (<http://ehp.niehs.nih.gov/>)

Environmental Health (<http://www.ehjournal.net/>)

Conduct of the Course

This online course consists of assigned readings, 14 lectures, 15 quizzes, discussions, 2 exams, and 1 term paper.

Assigned Readings and Lectures

There will be a total of **14** lecturing session/weeks. Students need to dedicate at least three hours per week for studying the material. You need to download the lecture (PPT) to your own computer to view the content and listen to the audible (an audio button will be available on most of the slides page upper right corner). The lecture will be released at midnight (11:59 PM) of the first day (Sunday) of the week. Plan wisely on your time-management, progress, balance your load throughout the semester. These are the key to surviving an online course.

Quizzes (48%)

All the students need to take a **pre-class quiz** about online class studying in order for them to begin the class sequence. At the end of each week/session, a 20-minutes quiz should be taken by the student. The quiz is due by midnight Sunday. The quizzes range between 15-20 questions each. The student can advance their progress through the semester by finishing lecture and quizzes each week. The quiz questions will be randomly drawn from textbook, lectures, assigned readings and CPH exam library, mostly multi-select single-choice questions, with a few T/F and match questions. Please pay attention to the quiz introduction as the grade weights of each question may not be equal. One minute should be allocated for each question, so do not **overthink** and simply trust your intuition and textbook materials. Some quiz questions come with a “feedback”, so you can check them if you get a wrong answer.

Hints: please read and study all the materials before you click the quiz start button. No “slow internet” or “broken laptop” story once you start to take the quiz. You are responsible for finding a stable internet environment or computer before you taking the quiz. I will not reset you quiz attempt once you started it. Occasionally, there will be D2L outages/glitches and Student services/IT typically sends email ahead, and students are responsible for paying attention to this kind of notices. Three lowest scored quizzes will be automatically dropped from your grade.

If you need advanced/extended access to the lecture or quiz due to time conflict (such as medical residency interviews) or emergency event (such as family reasons), you have to consult Dr. Wang as early as possible. (No more than **three** exemptions can be requested/granted per student per semester).

Online Discussions (6%)

Students are required to participate in the weekly online discussion on D2L. Dr. Wang and TA will monitor the online forum and lead the discussion. Participation in each week will earn the student 0.5 point, with accumulating to a maximum of 6 points. (which means you can skip 2 out of 14 weeks of discussion if you want, and still get a full grade)

Exams (16%)

Two exams will be administered on D2L during the semester. Exams are not cumulative, and each exam will only cover either first or second half of the semester. Each exam will be composed of 40 questions similar to the quizzes, and students are expected to answer them in 1 hour. Please pay attention to the due date, i.e. the last day that you can take the exam.

Term paper (5%+25%)

A review paper is due on **12/16**. The paper should be around a topic of students' interest related to the Environmental Health Field. The paper should be a **narrowly focused** review of some topics rather than a broad discussion. Common failures of chose topic include:

- I want to review the impact of climate change on environmental health.
- How about study infectious disease?

A good topic should be around a certain and specific disease, factor, pollutant, event, region, or phenomenon. Each student is asked to provide a topic and brief outline. The student needs to submit them and get Dr. Wang's **approval** on the paper topic by the midpoint of the semester (**10/16**) through D2L Dropbox. Please do not send your topic on 10/15 and hope it got approved. Failed get topic approval before 10/16 will result in a 0 point penalty. Change of topic after 10/16 will result in a 2.5 points deduction. (This usually happens if you did not do enough homework, i.e. "literature search" prior to the topic approval)

A term paper guideline, grading rubric, and other instructions can be found on D2L.

Extra credits (up to 5% for borderline grade)

There will be occasionally webinars, seminars, or similar events that by attending you will gain extra credits. For example, http://www.who.int/global_health_histories/en/ Completing surveys, give feedbacks to improve textbook, visiting office hours will also earn you extra credits. Dr. Wang will send out notice before these opportunities surfacing.

The maximum credit a student can earn is 5 points. Extra credit will **only** be used to bump "borderline" students to a higher grade. Dr. Wang reserves the right to determine what constitutes a borderline case.

Regarding groupings

Study group is encouraged but individual quiz content is not allowed to discuss prior to the due date. Cheat in quiz simply will not "work" because the questions are randomly drawn from a large question library with options also randomized.

Method of Evaluation and Grading

Grades will be based on the following:

1. Quizzes: 48%.
Each quiz will be 4 points with 20 questions (mostly 0.2 point per question with some exceptions). 3 lowest scores of your 15 quizzes will be dropped from the grading. Overdue quiz will result in a score of 0.
2. Online Discussion: 6%.
Participate in the online discussion will get a 0.5 point per week, total score will not exceed 6.
3. Mid-term exam: 8%:
40 Questions drawn from Quiz 1-7 Libs.
4. Final exam: 8%
40 Questions drawn from Quiz 8-14 Libs.
5. Term paper: 30%. (5% will be on timely topic approval, 25% from rubric)

Letter grades will be assigned as follows:

A: >90%; B: 80~89%; C: 70~79%; D: 60~69%; F: <60%.

No bump or curve will be made to adjust the final grade.

Course Outline

Week*	Topics	Textbook	Quiz Due
1	Syllabus Introduction to the Environmental Health	1	8/28 (pre) 8/28
2	Environmental Epidemiology and Toxicology	2&3	9/4
3	Environmental Policy and Regulation	4	9/11
4	Zoonotic & Vector Borne Disease	5	9/18
5	Toxic Metals	6	9/25
6	Pesticides and Other Organic Chemicals	7	10/2
7	Ionizing and Nonionizing Radiation	8	10/9
10/16	Final report topic due (5%) Mid-term exam due (8%) Mid-term course evaluation (10/3-10/14)		
8	Environmental Health on the Global Scale	Reading	10/23
9	Water Quality	9	10/30
10	Air Quality	10	11/6
11	Food Safety	11	11/13
12	Solid and Liquid Wastes	12	11/20
Thanksgiving week, cheers!			
13	Safety and Occupational Health	13&14	12/4
14	Health Communities and buildings	Reading	12/11
12/16	Final report (30%) due Final exam (8%) due, End course evaluation (11/28-12/9)		

* The dates and topics are subject to change, the lecturer will notify students about the change through D2L and email.

Course Policy Statements

This syllabus is intended as a guide for this course. Dates, assignments, and evaluation are subject to revision by the instructor. Any such revisions will be announced in advance.

Copyright. This syllabus and all related course material are protected under US Copyright Law and may not be further disseminated in any form or format without the prior explicit written consent of the faculty member. Failure to comply with this provision may subject the student to disciplinary action and/or state or federal action.

Student Professional Behavior in an Academic Program. Ethical and professional behaviors are considered a core competency in an academic program and, thus are key factors in good academic standing. Upon acceptance of an offer of admission, the student commits to comply with all professional conduct regulations established by the University, respective college, and program. The complete University policy is at www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf

Academic Misconduct Code. The code describes academic misconduct as acts intended to improperly affect the evaluation of a student's academic performance or achievement and includes but is not limited to acts such as cheating, plagiarism, fabrication, fraud, destruction, bribery or intimidation, assisting others in any act proscribed by this Code, or attempting to engage in such acts. The policy and procedures related to academic misconduct are detailed in the Academic Misconduct Code found in Appendix C of the Faculty Handbook at www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf

Academic Appeals. This policy outlines the procedure to request a hearing for appeals related to evaluation in a course, thesis or dissertation defense, general or comprehensive exam. It also outlines the appeal process for a suspension or dismissal or under the Student Professional Behavior in an Academic Program Policy, and the appeal of decisions resulting in dismissal, expulsion, or suspension from a program. The sole basis for an academic appeal is an alleged prejudiced or capricious evaluation or decision. Policy and procedure details are in Appendix C of the Faculty Handbook at www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf

Accommodation on the Basis of Disability. The University of Oklahoma is committed to the goal of achieving equal educational opportunity and full participation for students with disabilities. Accommodations on the basis of disability are available by contacting the Disability Resource Center (DRC) by email at drc@ou.edu. or by calling (405) 325-3852 or Voice or (405) 325-4173/TDD. Information on policies and registration with the Disability Resource Center may be found on the DRC website at: www.ou.edu/drc. Students requesting accommodations related to work in a course must contact the DRC as soon as possible; accommodations are not made retroactively.

Sexual Misconduct. For concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including Advocates-On-Call 24/7, counseling services, mutual “No Contact orders,” scheduling adjustments, and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office at (405) 325-2215 (8AM-5PM) or the Sexual Assault Response Team at (405) 605-0013 (24/7).

Adjustment for Pregnancy/Childbirth Related Issues. Students needing modifications or adjustments to course requirements because of documented pregnancy-related or childbirth-related issues should contact the college’s Assistant/Associate Dean for Student Affairs (or academic advisor) as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. See www.ou.edu/content/eoo/pregnancyfaqs.html for commonly asked questions.

Course Drop/University Withdrawal. The student is responsible to submit required University paperwork before the deadlines shown in the Academic Calendar online at <http://ouhsc.edu/admissions>. Missed homework and examination grades will be entered as a grade of zero if a student fails to formally drop the course or withdraw from the University.

HIPAA Compliance. The University of Oklahoma complies with all federal and state laws related to the confidentiality of patient medical information, including the Privacy and Security Regulations issued pursuant to the Health Insurance Portability and Accountability Act (HIPAA). Students are required to comply with these laws and related University policies and procedures, including the HIPAA Privacy and Security policies (<http://ouhsc.edu/hipaa/policies.asp> and <https://www.ouhsc.edu/compliance/hipaa-security-policy/default.asp>). Students are required to complete the University’s mandatory annual HIPAA training (<http://ouhsc.edu/hipaa/>) and must also comply with the related policies and procedures of their departments and any facilities in which they rotate.

Responsible Conduct of Research. Students, as members of the University community, have the responsibility to ensure that integrity and ethical standards in any activity with which they are associated directly or any activity of which there is sufficient knowledge to determine its appropriateness. Students are governed by the Policy on Ethics in Research (Faculty Handbook Section 3.25) at <http://www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf>.

Information for students regarding the MPH Core Competency Model

The Council on Education for Public Health (CEPH) has stated in its Accreditation Criteria:

For each degree program and area of specialization within each program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of degree programs. Competencies define what a successful learner should know and be able to do upon completion of a particular program or course of study. These statements describe in measurable terms the knowledge, skills and abilities a successful graduate will demonstrate at the conclusion of the program. The relationship between competencies and learning objectives (the incremental learning experiences at the course and experiential levels that lead to the development of the competencies) should be explicit and aligned with the school’s mission, goals and objectives. Given that competencies define the nature and content of a program and establish explicit student expectations, they should be widely available to students and prospective students, for example, on the school’s website, syllabi and/or in student handbooks. Competencies should guide the curriculum planning process and should be the primary measure against which student achievement is measured. The College of Public Health has adopted the core competency model of the Association of Schools of Public Health. These competencies are available at:

http://www.asph.org/publication/MPH_Core_Competency_Model/index.html

The following grid(s) list the relevant competencies derived from the ASPH model and/or other degree competencies as appropriate and indicate where in the course these competencies will be imparted.

Competencies	Lecture & Quiz	Paper	Primary/ Reinforce
Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.	Week 2, 4, 5, 6, 7	All	P
Explains genetic, physiologic, and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.	All		P
Interprets federal and state regulatory programs, guidelines, and authorities that control environmental health issues.	Week 4		R
Utilizes and applies methods and tools for assessing environmental risks.	Week 1, 2		P
Explains the general mechanisms of toxicology in eliciting a toxic response to various environmental exposures	Week 2		R
Articulate how biological, chemical and physical agents might affect human health.	All		P

Information for students regarding the MS in IH/EHS outcomes

In addition, the course will cover the following MS industrial hygiene/Environmental Health Sciences outcomes:

Outcomes	Lecture & Quiz	Paper	Primary/ Reinforce
IHGen H: Demonstrate the broad education necessary to understand the impact of solutions in a global and societal context	All	All	P
IHGen J: Demonstrate knowledge of contemporary issues	All		P
IHSpec I: Demonstrate understanding of fundamental aspects of safety and environmental health	All		P
IHSpec J: Demonstrate ability to attain recognized professional certification. (CIH rubric: biohazards)	All		R