EHS 575: Environmental and Occupational Health
Online, Fall 2017

Time: Online, content open on a weekly basis
**Location**: d2l.arizona.edu

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Course Staff Availability: Course staff will attempt to answer questions posed from students within 24 hours, during working hours. Working hours are typically 9am – 5pm Monday through Friday. A student asking questions between late Friday and Sunday should not expect a response until Monday. It is therefore important to ask any questions regarding work due on Sunday before the end of working hours on Friday. Given the online format, we will not hold regular in-person office hours.

Catalog Description: This course emphasizes health hazard sources, methods to identify and evaluate them, and frameworks used to affect hazard control. Students will evaluate public health issues, understand research designs, and identify and evaluate factors important to the development of monitoring programs.

Course Prerequisites: None required. CPH/EPID 573A: Basic Principles of Epidemiology and CPH/BIOS 576A: Biostatistics in Public Health are recommended.

Required Text: *Environmental Health: From Global to Local*, 2nd Edition by Howard Frumkin (Editor). Additional material may be posted on D2L. The 2nd edition can be purchased from the medical bookstore, online retailers, or checked out from the health sciences library. Through the University of Arizona library website there is also access to an eBook version. Make sure you have the 2nd edition, as chapter numbers and pages will differ between editions.
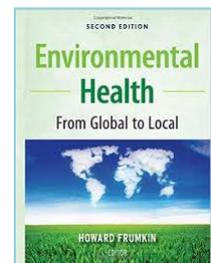
Course Notes: Although supplemental material will be posted on D2L, you are expected to take your own notes as you actively read the required chapters, distill major themes, prioritize terms and definitions, and identify relationships between themes and concepts.

Required or Special Materials: For this online course, it is expected that all students will have a reliable source of internet access and appropriate technology to complete online evaluations and submissions. Course staff cannot be responsible for unreliable, slow, or inconsistent computer or internet access. Students near or on campus have the option of using campus computer resources. At a minimum, students will need to access D2L approximately 3 times per week.

Course Requirements: As this is a survey or overview course, there is a lot of material to master and therefore an extensive amount of reading. You are expected to actively read the assigned chapters, keep notes on readings and other course material, take weekly quizzes, and complete all assignments and

exams. You will also be given several opportunities to participate and engage with other students online. Changes and other information about the class will be mailed to your University of Arizona e-mail address through D2L or posted on the course website. It is your responsibility to check this e-mail as well as announcements and news posted on D2L.

Course Schedule

Week	Month	Dates		Topic (Chapters)
1	Aug	21	27	Course Introduction, Ethics (7)
2	Aug/Sept	28	3	Foundations of Exposure Assessment (2,4)
3		4	10	Environmental Psychology (5)
4		11	17	Healthy Communities, Environmental Justice (8, 14)
5		18	24	Energy, Climate Change (10,13)
6	Sept/Oct	25	1	Air Pollution (12, 19)
7		2	8	Water, Hazardous Waste, & Health (15, 16)
8		9	15	Reflection
9		16	22	Food Safety, Pest Control and Pesticides (17,18)
10		23	29	Environmental Disasters, Radiation (21, 23)
11	Oct/Nov	30	5	Vulnerable Populations (11, 25)
12		6	12	Prevention (26)
13		13	19	Workplace Health, Safety, Injuries (20, 22)
14		20	26	Break
15	Nov/Dec	27	3	Risk Communication & Assessment (29,31)
16		4	10	Environmental Health Policy, Legal Remedies (30,32)
17		11	14	Final Exams

Evaluation
Point Distribution

Quizzes	10 highest scoring, 10 points each	100
Assignments	12 highest scoring, 15 points each	180
Final Exam		60
Participation		10
Total		350

Note that there will likely be more than 10 quizzes, but only your top 10 scores will be counted and others will be dropped. The same goes for your top 12 scoring assignments. Although you will be given opportunities for participation throughout the course, your participation score (0-10 pts) will only be determined at the end of the semester rather than for each opportunity. It is to your benefit to participate frequently across the semester to earn all 10 points. The final exam can be taken any time within the final exam period for the semester, however there is a time limit once you start your exam. You will not be able to make up the exam or take it outside of this window.

Student Evaluation and Policies: The standard scale for determining letter grades will be used based on a maximum value of 350 points: A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, E = 0-59%.

Late Policy: Due dates are typically on Sunday. Due times are typically set to midnight (12:00 AM), meaning submissions are due before midnight. There are no extensions for quizzes and announced participation opportunities. Written assignments will be accepted up to 24 hours after the due date/time, however, a 10% penalty (-1.5) will be included. Missing and late assignments (beyond 24 hours) will receive no credit. Aside from the dropped grades, there will be no extra credit or bonus opportunities.

Course staff will attempt to complete grading of assignments within about 1 week of the due date. Quiz solutions are usually available the day after the quiz closes (http://help.d2l.arizona.edu/faq/how-do-i-see-my-instructors-feedback-my-quiz).

Cases of plagiarism will at a minimum receive a grade of zero on a particular assignment (See **Plagiarism** below). Academic misconduct will at a minimum be reported to the Dean of Students with a recommendation of failure for the course. Requests for incompletes (I) and withdrawal (W) must be made in accordance with University policies (http://catalog.arizona.edu/policy-type/grade-policies). Recognize that incompletes (I) are not meant to permit students to submit late work, to extend deadlines, or re-do content, and are only permitted in rare cases. University policy regarding grades and grading systems is available at: http://catalog.arizona.edu/policy-type/grade-policies

Plagiarism: Plagiarism will not be tolerated. All assignments will need to be evaluated through TurnItIn, which will capture the degree to which content is original or copied from other sources. Since work must be evaluated with TurnItIn, assignments that are modified (e.g., converted to an image) in any way to bypass the originality check will not be permitted. If course staff determines that portions are considered not to be original, the student will receive an automatic zero, and/or will be reported to the Dean of Students, depending on the severity. For this course, what counts as plagiarism?
- Copying and pasting information from a web site or another source, and then revising it so that it sounds like your original idea
- Doing an assignment/essay/take home test with a friend and then handing in separate assignments that contain the same ideas, language, phrases, etc.
- Quoting a passage without quotation marks or citations, so that it looks like your own
     Note that using quotation marks should only be done on rare occasions when it makes sense that an idea is being attributed to an expert or historical figure, for instance. Copying several aspects of content and then putting them in quotes does not make it original work and is still not permitted
- Paraphrasing a passage without citing it, so that it looks like your own
- Hiring or soliciting another person to do your work for you, or purchasing a paper, through any of the on- or off-line sources
- Self-plagiarism: using your own work for multiple submissions, courses, or evaluations

D2L Warning: Be aware that D2L closes periodically for technical updates and changes. Closure notices are typically posted by the D2L Support Team on the course home page. Take note of any of these closure notices and if there is interference with a due date, complete any quiz or assignment prior to the closure and due date. Please plan accordingly and expect that there may be problems/congestion when trying to submit work within the last minutes before the due date/time. As a general rule, try to begin the homework submission process at the latest an hour before the due time.

Communications: You are responsible for reading emails sent to your UA account from your instructor and the announcements that are placed on the course web site. Information about readings, news events, your

grades, assignments and other course related topics will be communicated to you with these electronic methods. The official policy can be found at: https://www.registrar.arizona.edu/personal-information/official-student-email-policy-use-email-official-correspondence-students.

Because this is an online only course, you should check the course page on D2L at least once per day. **Course-related questions** should be posted on the **Discussion** board in the appropriate category (i.e., General Administration, Quizzes, Assignments). Course staff will make every attempt to answer questions via a post to the board within 24 hours <u>during typical working hours</u> (M-F, 9am-5pm). If posting/sending a question late on Friday, do not expect a response until Monday. If someone has already posted your question, please do not repeat the question. If questions are more of a personal nature, please send via e-mail. Note that general questions mistakenly sent via e-mail may be posted to the Discussion board by course staff. Course staff may also delete inappropriate questions or posts.

Course Learning Objectives: At the end of this course, students will be able to:
1. Specify approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety.
2. Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.
3. Specify current environmental risk assessment methods.
4. Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.
5. Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.
6. Explain the general mechanisms of toxicity following various environmental exposures.
7. Develop a testable model of environmental insult.
8. Describe federal and state regulatory programs, guidelines and authorities that control environmental health issues.

MPH/SECTION Competencies Covered:
A. ANALYTICAL SKILLS:
A-1. Defines a problem
A-2. Determines appropriate uses and limitations of data
A-3. Selects and defines variables relevant to defined public health problems
A-4. Evaluates the integrity and comparability of data and identifies gaps in data sources
A-5. Understands how the data illuminates ethical, political, scientific, economic, and overall public health issues
A-6. Understanding basic research designs used in public health
A-7. Makes relevant inferences from data

B. COMMUNICATION SKILLS:
B-1. Communicates effectively both in writing and orally (unless a handicap/online setting precludes one of those forms of communication)
B-2. Interpreting and presenting accurately and effectively demographic, statistical, and scientific information for professional and lay audiences adapting and translating public health concepts to individuals and communities
B-3. Soliciting input from individuals and organizations

B-4. Advocating and marketing for public health programs and resources, including political lobbying, grant writing, collaboration building, and networking
B-5. Leading and participating in groups to address specific issues, including ability to work in teams, span organizational boundaries, and cross systems
B-6. Using all types of media to communicate important public health information
B-7. Demonstrating cultural competency in all of the above and community development

C. POLICY DEVELOPMENT SKILLS:
C-3. Articulating the health, fiscal, administrative, legal, social, political, and ethical implications of each policy option
C-6. Identifying public health laws, regulations, and policies related to specific programs
C-7. Developing mechanisms

D. CULTURAL SKILLS:
D-1. Understanding the current forces contributing to cultural diversity in the Southwest
D-2. Interacting competently, respectively, and professionally with persons from diverse backgrounds
D-3. Identifying and examining the role of cultural, social, ethnic, religious, spiritual, and behavioral factors in determining disease prevention health promoting behavior, and health service organizational and delivery
D-4. Developing and adapting approaches to public health problems that take into account cultural differences
D-5. Determining health related consequences of social structure
D-6. Understanding the dynamic forces contributing to cultural diversity

E. BASIC PUBLIC HEALTH SCIENCE SKILLS:
E-1. Defining, assessing, and understanding the health status of population, determinants of health and illness, factors contributing to health promotion and disease prevention, and factors influencing the use of health services
E-2. Understanding research methods in all basic public health sciences
E-3. Applying the basic public health sciences including behavioral and social sciences, biostatistics, epidemiology, environmental health, and prevention of chronic and infectious diseases and injuries

Disability Accommodations:
It is the University's goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately, so that we can discuss options. You are also welcome to contact the Disability Resources (520-621-3268) to establish reasonable accommodations (as it is very important that you be registered with the DRC).   For additional information on Disability Resources and reasonable accommodations, please visit http://drc.arizona.edu/students

Code of Academic Integrity
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercise must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity, available

through the office of the UA Dean Students: http://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity

Classroom Behavior: (Statement of expected behavior and respectful exchange of ideas:
Present policies to foster a positive learning environment, including use of cell phones, mobile devices, etc.).   Students are expected to be familiar with the UA Policy on Disruptive Student Behavior in an Instructional Setting found at: http://policy.arizona.edu/education-and-student-affairs/disruptive-behavior-instructional-setting

Threatening Behavior Policy: The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to one's self, http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

Online Behavior: Netiquette is a form of online etiquette – an informal code of conduct that governs what is generally considered to be the acceptable way for users to interact with one another online. (Adopted from Mary Kay O'Rourke and *Netiquette* by V Shea)
1. Remember the Golden Rule: *Do unto others as you would have them do unto you*. If you post with a gentle and respectful tone, it is likely others will reflect the same tone back. Realize also that without context things can sound much harsher online than they would sound face to face. Carefully review and edit your comments not only for grammar and spelling but also for how they could be perceived.
2. Use the same standards of behavior online that you follow in real life: Person-to-person, most people are fairly nice to each other. Online, however, it is easy to forget that there is a human being on the other side of the computer. Ethics, common sense, and standards of civility do not disappear when you take control of a keyboard.
3. Avoid personal attacks: It is one thing to disagree with an idea, but another to make it personal. Challenge the **thought**, not the person who wrote it. This means avoiding degrading words and often the pronoun *you*. Instead try using *I disagree with this idea*. As a good practice, start with something positive or at least neutral about a person's idea, and then offer your alternative point of view. Also understand that what some people believe to be facts are in reality often opinions. Try to understand that different upbringings and outlooks on life often lead to different opinions and there should be an attempt to respect these differences. The goal is to promote discussion not with an argument by any means.
4. Respect other people's time: When you send e-mail or post to a discussion group, you are essentially asking people to use their time to read and consider your thoughts and ideas. It is your responsibility to ensure that the time they spend reading your post is of some value. If you cannot say anything more than *I agree* without adding any intellectual value to the issue, you probably should not post at all. Make the reader's time well-spent by explaining *why* you agree or disagree.
5. Make yourself look good online: Like the real world, most people just want to be liked. In discussion groups you will not be judged by what you look like or how you dress. However, you **will** be judged by the quality of your writing, your tone, and the intellectual value you are contributing to the conversation.
6. Share your knowledge: We are here to learn from each other. In this regard, please pose questions to each other. The reason asking questions online is valuable is because a lot of knowledgeable people are reading the questions. If even a few of them offer intelligent answer, the sum total of world knowledge increases.

7. Help keep flame wars under control: *Flaming* is what people do when they express a strongly held opinion without holding back any emotion. This is usually a form of a personal attack. Let something you are very emotional about sit overnight before posting.
8. Don't shout: The use of CAPITAL LETTERS comes across as shouting. While you might want to use it to emphasize a word or two, do not capitalize whole sentences, paragraphs, or entire messages. You will come across as being angry.
9. What goes around comes around: Postings, even e-mail sent to an individual, may not necessarily remain private. With the click of a mouse, they can be forwarded anywhere to anyone. Eventually anything you post can come back to haunt you. Think before you write. Think before forwarding, without permission from the sender, any post or e-mail you may have received from others.
10. Be forgiving of other people's mistakes: Whether it's spelling errors, mistakes in grammar, or typographical errors, be considerate. Do not feel the need to correct everyone's minor mistakes. If mistakes prevent you from comprehending a post, feel free to ask for a clarification, and keep in mind that your goal in discussions is to evaluate and explore **ideas**, not criticize people.

Nondiscrimination and Anti-harassment Policy:
The University of Arizona is committed to creating and maintaining an environment free of discrimination, http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

UA Smoking and Tobacco Policy:
The purpose of this Policy is to establish the University of Arizona's (University) commitment to protect the health of University faculty, staff, students, and visitors on its campuses and in its vehicles, http://policy.arizona.edu/ethics-and-conduct/smoking-and-tobacco-policy

Syllabus Changes: Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.