

Environmental Health

ENVR 600-01W, ENVR 600-971 (3 credit hrs)
(last update: Aug 2015)

Instructor Info Courtney Woods, Ph.D. Lecturer, Dept. of Environmental Sciences and Engineering
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Office Hours Online or face-to-face meetings available by appointment

Text Primary readings will be assigned from *Our Global Environment* by Anne Nadakavukaren, 7th Edition, Waveland Press, Inc. 2011. Hardcopies may be obtained from the UNC Student Stores. The e-book is available through [CourseSmart](#). Add'l readings or videos will be posted on Sakai.

Course Description This course surveys local and global environmental health issues. Students will utilize selected readings and media to characterize the impact of environmental agents on human health, the environmental consequences of anthropogenic activities, and the interdependency between humans and the natural environment. The course is targeted to graduate students in public health and upper level undergraduates who are interested in pursuing graduate education or research in public health.

All students who are enrolled must have frequent access to a computer or notepad with a microphone and a reliable internet connect to download materials, watch videos and to complete assignments.

Course Objectives This course is designed to expose students to current practices used to assess human health risks and strategies for mitigating and managing environmental hazards. Students will examine domestic and global environmental issues and learn how science and policy influence health and environmental outcomes. Finally, students will begin to develop some skills necessary for conducting research in public health.

Key ASPH Competencies covered in this course	Example Topics	Lessons
Recognize environmental factors including biological, physical and chemical factors that affect the health of a community.	fate and transport; pesticides and metals toxicity	1 - 14
Understand the patterns of disease and injury in human populations and apply to the control of health problems.	Foodborne illnesses, cryptosporidium outbreak	6,11
Apply constructs of behavioral, social and cultural theories related to individual and population health and health disparities over the life course.	indoor air pollution, lead poisoning	6, 7
Gather, process, and present information to different audiences in-person, through information technologies, or through media channels.	risk communication, public health advisories	7,10,11
Demonstrate the ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.	Environmental justice	9-12
Incorporate public health biology – the biological and molecular context of public health – into public health practice.	Epigenetics, toxicology, susceptible populations	3,4
Demonstrate ethical choices, values and professional practices implicit in public health decisions while considering the effect of choices on community stewardship, equity, social justice and accountability.	climate change, population control	8,13
Demonstrate ability to plan for the design, development, implementation, and evaluation of strategies to improve individual and community health.	Risk management, health /envr. impact assessments	4,7
Recognize system level properties that result from dynamic interactions among human and social systems and how they affect the relationships among individuals, groups, organizations, communities, and environments.	Population dynamics	1,2,8,13

Grading Scheme:	Online Sessions & Discussion Board	25%	Grading Scale:	95-100 H/ A	93-94 H/A-
	Quizzes (8)	33.33%		90-92 P/ B+	85-89 P/ B
	Writing Assignment & Project	16.67%		80-84 P/ B-	77-79 L/C+
	Exams (2)	25%		74-78 L/C	70-73 L/C-
				69 and below F	

Course Schedule

Lesson	Lesson Period	Topic	Activities/Assignments Due
0	Aug 18 – Aug 23	Course Overview and Introductions	<ul style="list-style-type: none"> • Intro Discussion Forum • Lesson 0 Quiz
1	Aug 23 – Aug 30	Population Dynamics (Chapter 2)	<ul style="list-style-type: none"> • <i>Online Discussion Session</i> • Lesson 1 Quiz
2	Aug 30 – Sept 7 Labor Day	Impacts of Growth on Ecosystems (Chapter 5)	<ul style="list-style-type: none"> • Voicethread *Due 9/7 @ 11:59 pm
3	Sept 6 – Sept 13	Environmental Disease (Chapter 6)	<ul style="list-style-type: none"> • <i>Online Discussion Session</i> • Lesson 3 Quiz
4	Sept 13 – Sept 20	Toxic Substances & Risk Assessment (Chapter 7)	<ul style="list-style-type: none"> • Lesson 4 Discussion Forum
5	Sept 20 – Sept 27	Pests and Pesticides (Chapter 8)	<ul style="list-style-type: none"> • <i>Online Discussion Session</i> • Lesson 5 Quiz
6	Sept 27 – Oct 4	Food Quality (Chapter 9)	<ul style="list-style-type: none"> • Lesson 6 Discussion Forum • Writing Assignment
7	Oct 4 – Oct 11	Radiation & Risk Management (Chapter 10)	<ul style="list-style-type: none"> • <i>Online Discussion Session</i> • Lesson 7 Quiz
8	Oct 11 – Oct 19 Fall Break	The Atmosphere & Climate (Chapter 11)	<ul style="list-style-type: none"> • Mid-term: Lessons 1-7 * Due by 10/19 @ 11:59 pm
9	Oct 18 – Oct 25	Air Pollution (Chapter 13)	<ul style="list-style-type: none"> • <i>Online Discussion Session</i> • Lesson 9 Quiz
10	Oct 25 – Nov 1	Water Resources (Chapter 15)	<ul style="list-style-type: none"> • Lesson 10 Discussion Forum
11	Nov 1 – Nov 8	Water Pollution (Chapter 16)	<ul style="list-style-type: none"> • <i>Online Discussion Session</i> • Lesson 11 Quiz
12	Nov 8 – Nov 15	Solid and Hazardous Waste (Chapter 17)	<ul style="list-style-type: none"> • Lesson 12 Discussion Forum
13	Nov 15 – Nov 22	Population Control & Food Security(Chapter 3&4)	<ul style="list-style-type: none"> • <i>Online Group Presentations</i> • Lesson 13 Discussion Forum
14	Nov 22 – Nov 30 Thanksgiving	Onward to a Healthy and Sustainable Future (Chapter 12)	<ul style="list-style-type: none"> • Lesson 14 Quiz *Due by 11/30 @ 11:59 pm
	Nov 29 – Dec 3	Course Review and Reflections	<ul style="list-style-type: none"> • Voicethread
	Dec 3 - 7	Final exam period for this course	<ul style="list-style-type: none"> • Final Exam: Lessons 8-14 Due by 12/7 @ 11:59 pm

*Note that the final day of this lesson period falls on a Monday or Tuesday; thus, the marked assignments have extended due dates.

Course Structure & Logistics

Course Content On the ENVR 600 course site in Sakai, use the “Lessons” tab to access instructions for each lesson and the lesson materials (excluding the textbook). For each lesson, you are expected to review the annotated/narrated slides and a textbook chapter. Additional content (including journal articles, videos, web links) will also be listed. These materials will be labeled as required, optional or as reference material. **You should plan to commit 9 -12 hrs a week to** reviewing the lesson materials, attending online discussions, writing in the discussion forum and/or completing lesson assignments. This is based on the idea of 1 hr of “in-class time” per credit hour plus 2-3 hours of work outside of class per credit hour.

Opening Dates and Deadlines Please refer to the course schedule in this syllabus frequently throughout the semester so that you are aware of upcoming assignments. You will have 1 week to complete each lesson. Unless otherwise noted, each lesson will open on Sunday morning and end on the following Sunday at 11:59 pm. In general, quizzes, writing assignments and exams are due on the closing Sunday of the lesson. You will still have access to materials from the previous lesson after the lesson period ends. Due to the fast pace of the course, only one lesson will be opened at a time. Students who are interested in moving along more quickly can do so by reading ahead in the textbook

Completing the Lessons and Evaluating Your Performance I encourage you to use the lesson overview slides as a way to help you navigate the lessons and prioritize the material as you are completing the lessons. You will have several opportunities to assess your performance in the course. The Study Guide booklet that accompanies the course textbook is one way to informally assess how well you learned materials from the primary text and identify concepts that you need to review again for better understanding. Answers to study guide questions will not be provided, but I encourage you to work with other students to discuss answers and contact me or the TAs about questions that you are unsure about.

Below is a breakdown of how your performance will be formally evaluated for your course grade.

Participation in Discussion Forums and Synchronous Discussions (600 pts) Each student will be assigned to a peer group comprised of approximately 12-16 students. It is within these peer groups that students will participate in synchronous online discussions sessions, asynchronous discussion boards (aka forums) and Voicethread. The discussion forum topics will be posted in Sakai for each lesson. For the discussion forum and Voicethread, unless otherwise noted, your original posts should be submitted **by 11:59pm on Friday of the lesson period**, and you should return any time before the end of the lesson period to comment on your peers’ posts. Both your original post and comments will be considered in the grading. Each post is worth 50 points for a total of 300 points.

There will be six (6) synchronous online discussion sessions that will be facilitated by me and/or your teaching assistant. Students are expected to attend at least 1 session every other week, which can be accessed via the Blackboard Collaborate web-conferencing application in Sakai. These sessions will occur on Tuesdays, Wednesdays and Thursdays between the hours of 4:00 – 8:30pm EST, and each session will last for no more than 1 hr. During the session, we will engage in Q&A, large group discussion and/or break-out discussions related to the lesson topic. In the Lesson 0 quiz, after you indicate your evening availability, you will be assigned to a peer group and informed of your online session time. You are encouraged to attend your group’s session, but in the event that you have a conflict for any given week, you have the option to join another group’s session. Contact your TA as soon as you become aware of the time conflict so that they can arrange to add you to a different session. Students can earn up to 50 points for active participation in these sessions, for a total of 300 points.

Quizzes (600 pts) Lesson quizzes will be another way in which your comprehension of course materials will be evaluated. There are 7 quizzes of the course content. Your lowest quiz grade will be dropped, so only 6 quizzes (at 100 points each) will be used to determine your final grade. The Lesson 0 quiz will not count towards your course grade, but you are required to complete it so that 1) you become familiar with the Sakai Tests and Quizzes feature, 2) to ensure that you understand details about the course structure and 3) so that we can determine your availability for online sessions. Unless otherwise noted, all quizzes are due by 11:59 pm on the final day of the lesson period. Each quiz will be comprised of approximately 10-15 questions, and students will have 1 hr to complete the quiz. Students are allowed to use their textbooks, lesson materials on Sakai, personal course notes and other online resources; however, students are not allowed to share any information about the quiz with students who have not yet taken the quiz and students are not allowed to work on the quizzes together. Fill-in-the-blank and short essay questions will be graded manually; therefore the grade shown upon submission may not be your final grade for the quiz. To determine whether your quiz has been completely graded, please look for the note at the top of your feedback form indicating that “your grade and feedback have been updated.” If you don’t see the note, the quiz grading has not been completed. Generally, quiz grading will be completed within 4 days of the lesson closing date. If you wish to dispute an answer on your quiz, you should do so no later than 1 week after your quiz grade has been posted.

Writing Assignment and Group Project (400 pts) Students will complete 1 writing assignment (3-4 pages in length) and 1 group project, each worth 200 points. The writing assignment instructions and grading rubric will be posted at least 2-3 weeks before the due date, and the group project instructions and rubric will be posted after the mid-term. The group presentations will be delivered online via Elluminate Live.

Exams (600 pts) Two exams will be offered, each worth 300 points. The mid-term exam will include all materials from Lessons 1 to 7, and the final exam will include lessons 8 to 14. Students are allowed to use their textbooks, lessons materials on Sakai, course notes and other online resources; however, students are not allowed to share any information about the exam with other students and are not allowed to work together on the exam. You will have several days to complete the exam (as indicated on the course schedule). Make-up exams are provided only in instances of medical or family emergency, and excuses presented on the final day of the exam period may not be accepted.

Missing an Assignment or Discussion Please send a message to me and your TA as soon as you realize that you have a conflict with any of the dates listed that may prevent you from submitting an assignment on time. Unless a valid medical or family emergency is provided, late exams will not be accepted. Late assignments submitted without sufficiently notifying the instructor prior to submission will incur point deductions. Again, please periodically check the course schedule above syllabus and the calendar on Sakai for assignment deadlines.

Our Online Learning Community Active participation in this online class is important to creating an enriching learning community for yourself and your peers. Each student has a unique perspective to share, and it is the diversity of experiences that will make for rich discussions and exchanges during the course. This course will review topics that many students in the past have written and spoken about very passionately. Very often students’ viewpoints conflict, so I ask that you always write or speak respectfully to fellow classmates. You can respectfully disagree with a peer without being offensive.

Honor Code Your work on assignments and examinations is governed by The University of North Carolina Honor Code (<http://honor.unc.edu>). The Honor Code states "It shall be the responsibility of every student at The University of North Carolina at Chapel Hill to obey and to support the enforcement of the Honor Code, which prohibits lying, cheating or stealing when these actions involve academic processes or University, student, or

academic personnel acting in an official capacity." You must affirm the honor code pledge for exams and other graded assignments. Instructors are required to report apparent violations to the Student Attorney General. In the past Honor Code violations have resulted in students in online course being dismissed from UNC.

Need Help? You can email us at any time with questions. If something is unclear about an assignment, please make sure that you have read all of the instructions first and have exhausted all resources that you are aware of before email us. You will usually get a response the same day or within 24 hours during the week and within 24-48 hrs on the weekend. If your question is urgent, you should send your question through Sakai using the Messages feature. Send your email to all instructors (choose "Instructor Role" in the "To:" field of the message), to increase your chances of receiving a speedy response. Follow the exact instructions below whenever you need to contact us with any questions or issues. This will ensure a prompt reply and help us manage issues.

Technical Issues For issues with your computer, Sakai or access to external sites, please post your issue on the "Houston, we have a Problem" discussion forum. Your peers may be having a similar problem and have identified a solution. The TAs and I will also be monitoring this discussion forum, so you should receive a timely response from us or your peers. In your message, please be as detailed as possible in your description of the technical issue, including exactly where and when the issue occurred and the exact action you were taking. Provide the text of any error message. A description of your computer set-up, including the browser and browser version you were using, your operating system and type of internet connection, is also very helpful.

The professor reserves the right to make changes to the syllabus, including assignment due dates and exam dates, when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.