

SPRING 2014

Environmental Health

ENVR 600-01W, ENVR 600-971 (3 credit hrs)

Instructor Info Courtney Woods, Ph.D.
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Office Hours Monday and Wednesday from 3-4 pm and virtually on Elluminate Live from 4-5 pm
TAs will also meet with students 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 or the e-book is also available through [CourseSmart](#). Any additional 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.

This course is facilitated completely online. All students who are enrolled must have frequent access to a computer or notepad and reliable internet service to download materials, watch videos and to complete all assignments.

Course Objectives This course is designed to expose students to current practices used to assess human health risk 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.

ASPH Core Competencies for Environmental Health

ASPH Competencies	Topic & Examples	Chapter
Describe the direct & indirect human, ecological and safety effects of major environmental and occupational agents.	Fate and transport, DDT, asbestos and mercury toxicity	5 & 7
Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.	Stress and asthma; cancer susceptibility; children's exposure	6 & 7
Describe federal and state regulatory programs, guidelines and authorities that control environmental health issues	Food and consumer products; air and water quality standards	8, 9, 13 & 16
Specify current environmental risk assessment methods.	Hazard ID, dose-response assessment, exposure assessment, risk characterization	7 & 8
Specify approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety.	Food safety, Regulatory standards, environmental/engineering controls,	9, 13, 15, 16 & 17
Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures.	Cancer and mutagenic changes in DNA	6 & 7
Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.	Hazardous and solid waste; Landfills and Brownfields in low-income communities	10 & 17
Develop a testable model of environmental insult.	Lead poisoning	7, 11 & 13

Graded	Discussion Forum/ Participation 15%	Grading Scale: 95-99 H/ A	93-94 H/A-
Assignments:	Quizzes (7) 35%	90-92 P/ B+	85-89 P/ B
	Exams (2) 30%	80-84 P/ B-	77-79 L/C+
	Writing Assignment 10%	74-78 L/C	70-73 L/C-
	Group Project 10%	69 & below F	

Course Schedule

Lesson	Lesson Period	Topic	Assignments Due*
0	Jan 8 – Jan 12	Course overview and introductions	Discussion Forum (not graded) Lesson 1 Quiz (not graded)
1	Jan 12 – Jan 21*	Population Dynamics (Chapter 2)	Lesson 1 Quiz Voicethread
2	Jan 19 – Jan 26	Impacts of Growth on Ecosystems (Chapter 5)	Lesson 2 Discussion Forum
3	Jan 26 – Feb 2	Environmental Disease (Chapter 6)	Lesson 2 Exec Summary ** Lesson 3 Quiz
4	Feb 2 – Feb 9	Toxic Substances (Chapter 7)	Lesson 4 Discussion Forum On-Campus Recitation
5	Feb 9 – Feb 16	Pests and Pesticides (Chapter 8)	Lesson 4 Exec Summary Lesson 5 Quiz
6	Feb 16 – Feb 23	Food Quality (Chapter 9)	Lesson 6 Discussion Forum Essay 1
7	Feb 23 – Mar 2	Radiation (Chapter 10)	Lesson 6 Exec Summary Mid-term on Lessons 1-7 Lesson 7 Quiz
8	Mar 2 – Mar 17*	The Atmosphere (Chapter 11) Spring Break	On-campus Recitation Lesson 8 Quiz
9	Mar 16 – Mar 23	Air Pollution (Chapter 13)	Lesson 9 Discussion Forum
10	Mar 23 –Mar 30	Water Resources (Chapter 15)	Lesson 9 Exec Summary Lesson 10 Quiz Voicethread
11	Mar 30 – Apr 6	Water Pollution (Chapter 16)	Lesson 11 Discussion Forum
12	Apr 6 – Apr 13	Solid and Hazardous Waste (Chapter 17)	Lesson 11 Exec Summary Lesson 12 Lesson Quiz
13	Apr 13 – Apr 21*	Population Control & Food Security(Chapter 3&4)	Lesson 13 Discussion Forum On-campus Recitation
14	Apr 20 – Apr 25	Onward to a healthy and sustainable future	Lesson 13 Exec Summary Lesson 14 Quiz Essay 2
	Apr 27	Course Wrap-up and Review Posted	
	May 1 - 5	Final exam period for this course	Final exam on Lessons 8-14

*Note that the final day of these lesson periods falls on a Monday

** Each executive summary is submitted an assigned group of students; Summaries are due on Weds. of the lesson period in which they are listed above

Course Structure & Logistics

Our Online Learning Community Though we may never meet face-to-face, there will be plenty of opportunities for us to interact, and I hope that you will find these “online” interactions just as meaningful. Your active participation in the online classroom is important to creating an enriching learning community for yourself and your peers. Your experience in the world may be quite different from another student’s so don’t feel that your comments or input aren’t worth sharing. Having said that, some of the topics that will be discussed in the course are topics that are widely debated and highly politicized. Please always be respectful when writing or commenting in the discussion forum. You can respectfully disagree with a peer without being offensive. In general, just be mindful of your tone. Students that are repeatedly disrespectful will be penalized in their forum grades.

Opening Dates and Deadlines Please review the course schedule above for the timeframe for each lesson. With exception of the lessons occurring during Fall Break and Thanksgiving, each lesson will close on Sunday at 11:59 pm and a new Lesson will open at 10am. All deadlines for assignments and exams will be enforced. Unless a medical excuse or urgent issue can be demonstrated, students will not be allowed to assignments after the deadline has passed. Please periodically check the course schedule on the syllabus, and 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 will prevent you from submitting an assignment on time.

Course Content In each lesson, you will be expected to review all primary content, consisting of textbook readings and annotated/narrated slides. Additional content (including articles, videos, web links) will also be listed within each Lesson under the “Lessons tab.” Some of these materials will be labeled as required, encouraged and as reference material that you may find useful well after the course has ended. A complete list of the links will be provided at the end of each lesson. You should expect to spend 9-12 hrs a week on this course.

Performance Evaluation You will have several opportunities to assess your performance in the course. I encourage you to use the Study Guide as a means for informal assessment. Many quiz questions will likely be taken directly or modeled after questions from the guide. Also, working through the questions will help you identify concepts that you need to review again for better understanding.

Discussion Forums (300 pts) Each student will be assigned to a peer group comprised of approximately 16 students. It is within these peer groups that students will participate in the discussion forum. The discussion forum assignments will be the primary way to share ideas and learn from your peers. A writing prompt will be posted with each Lesson. Your posts should be submitted by 11:59pm on Friday of the lesson period, and you may 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 for this grade. Each forum post is worth 40 points for a possible total of 200 points. Each week an editorial board of 2-3 students will be tasked with the responsibility of working together to prepare a 1-page executive summary of the discussions from their forum to share with other groups in the class. The editorial board members are not required to create an original discussion post for the Lesson that they are summarizing. Rather, they will work collaboratively (after all posts have been submitted) to create a cohesive summary by the Wednesday of the following Lesson Period. Each student will only contribute to 1 exec. summary during the semester, which counts 100 points towards your discussion forum grade.

Quizzes (700 pts) Lesson quizzes should be submitted by 11:59 pm on the final day of the lesson period (usually a Sunday). Each quiz will be comprised of approximately 15-20 questions, and students will have 1 hr to complete it before a penalty (5 points per 10 min interval) is incurred. Students are allowed to use their textbooks, Lessons on Sakai, 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

it. Your lowest quiz grade will be dropped, so only 7 quizzes (at 100 pts each) will be used to determine your grade

Exams (600 pts) Students will complete two exams this semester, each worth 350 pts. The mid-term exam will include all materials from Lessons 1 to 7 and the final exam will include lessons 7 to 14. Students are allowed to use their textbooks, Lessons on Sakai, course notes and other online resources; however, students are not allowed to share any information about the exam with other students who have not yet taken it. Make-up exams are provided only in instances of medical emergency, and excuses obtained on the final day of the exam period will not be accepted.

Writing Assignments (200 pts) Students will complete 1 writing assignments this semester. The prompt for the writing assignment will be posted at least 2-3 weeks before the writing assignment due date. Also a rubric for the writing assignments will be posted on Sakai so that students understand how these assignments will be graded.

Other Course Elements We will also meet synchronously either 1 or 2 times during the semester using Elluminate Live. Once we determine student availability, these sessions will be announced.

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. We expect you to have read the materials and have legitimate questions. Please make sure that you have read all of the instructions first and have exhausted all resources that you are aware of before sending questions. You will usually get a response the same day or within 24 hours during the week and with 24-48 hrs on the weekend. If your question is urgent, you should send your question to all instructors, 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.

1. Click on the "Messages" tool linked in the Sakai course.
2. Click on "Compose Message".
3. In the "To:" field, choose "Instructor Role", which will ensure that the message is received by both the instructor and TAs.
4. Leave "Send Cc" checked; do NOT uncheck this field.

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.