PubH 3102, section 320
Issues in Environmental and Occupational Health
Fall Semester 2017 (updated 8/31/17)

Credits: 3
Meeting Days: September 5 – December 13, 2017
Meeting Time: Online at moodle.umn.edu
Meeting Place: Online at moodle.umn.edu
Instructor: Petrona Lee, PhD
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Office Hours: email any time or in-office by appointment

I. Course Description
This course is an introduction to the field of Environmental and Occupational Health (EOH), the impact of environmental and occupational hazards on individuals and communities, the approaches taken to address EOH issues at the community level, and the challenges that must be overcome to ensure success in dealing with EOH issues. Students will review scientific literature to learn about interventions for environmental health problems, and practice identifying environmental health problems and interventions in their communities. The focus of this course will be on the interaction between humans and the environment and how this interaction affects human health.

II. Course Prerequisites
None
III. Course Goals and Objectives

Upon completion of the course, students will be able to:

1. Articulate basic concepts in environmental health and public health, and convey an understanding of their value and importance to the public, policy makers, and other interested parties;
2. Identify major sources of environmental and occupational hazards, the ways in which humans are exposed to them, and the major human health effects from exposure to these hazards;
3. Discuss the major intervention strategies for preventing and/or minimizing human exposure to environmental and occupational hazards;
4. Discuss local history, community demographics, cultural, political, and administrative issues, and their impact on environmental or occupational health issues and solutions;
5. Examine and evaluate the programs that are in place to address environmental and occupational health problems at the local (community or individual organization) level; and
6. Analyze the nature of environmental and occupational health problems in broader context through systematic research using scientific literature, press sources, and consultations with key persons, organizations, and agencies.

IV. Methods of Instruction and Work Expectations

Students are expected to complete assignments and ask questions and seek clarifications when topics or concepts are unclear. Students may email the course instructor or the teaching assistant.

All email correspondence between students and instructor about the course must be through the official University of Minnesota email system. We will attempt to answer emails within 24 hours during the week. Please be aware that it may take longer to get back to you on the weekends.

For all communications with your instructor or TA, please add PUBH 3102 in the subject line. This gives your message top priority and for the instructor to know which class you are in (I am teaching two courses this semester!).

This is not a “work at your own pace” course. You are expected to check the Course Outline/Weekly Schedule for due dates of assignments. Point deductions will be made if assignments are turned in late. No individual notices will be sent to students regarding assignment due dates. We will monitor your progress online throughout the semester.

Approximately 135 hours of student effort, on average, will be required for a student to achieve an average grade. Students will spend time reading online content and completing online activities (55 hours), reviewing online resources, and completing offline assignments (80 hours).

You may check for your grades 3 days after each assignment due date and contact the TA immediately if you cannot find your grade or have a question regarding your grade.

Evaluation Criteria

Introductions

Introductions posting is worth 10 points. Posting should be completed by 11:55 pm (Central time) on Monday of the week it is assigned, as described in the Course Outline/Weekly Schedule.
Weekly Chats
We will hold a live weekly chat on Wednesdays at 8:00-8:45 pm (central time) with the instructor and TA. You are encouraged to visit with questions you may have.

Discussion Assignments (10 points each)
Students will be divided into random small groups to discuss topics related to each module. The instructor and TA will participate in these discussions. Each group will post a final summary of their discussion.

Quizzes (10 points each)
Weekly quizzes will be available for one week. Specific dates are described in the Course Outline/Weekly Schedule. You will have one hour to complete each quiz. You must complete the full quiz in one session; you cannot start the quiz, stop, and restart at a later time.

Exams 1, 2, and 3
The exams for the course will be available for one week. Specific dates are described in the Course Outline/Weekly Schedule. Exam 1 is based on the Air, Water and Food modules; Exam 2 is based on the Land, Housing and Pests modules. Exam 3 will cover Infectious Diseases, Chronic Diseases and Ethics, and include questions from previous modules. The exams will be multiple choice, matching, true/false and short answer questions and a short paper. You will have one hour to complete the quiz portion of the exams. You must complete the quiz portion in one session; you cannot start the exam, stop, and restart at a later time. The paper portion of the exam is not timed, however it must be submitted by the due date. You must complete both parts to receive full credit.

Current Issues Paper
You may complete a Current Issues Paper for extra credit. Note: if you have never used peer reviewed scientific articles in research you may find tutorials at the U of Minnesota Libraries useful. Also, note that information from dot com websites is not acceptable as peer reviewed scientific literature in this course. You must also include in text citations according to the APA citation style manual, as well as a list of references at the end of your paper. The paper due date is listed in the Course Outline/Weekly Schedule.

Professional Conduct
Students are expected to perform as professionals. Please refrain from using profanity in any and all communications in this course. Any work that contains profanity shall not be graded and will be returned to be corrected. This will be counted as a missed assignment/quiz/paper, etc. The student will be allowed to re-do the work, however, if this is after the due date, it will be penalized as outlined in the syllabus.

V. Course Text and Readings
The required text below provides supplemental material to the learning modules.


The text can be obtained through the U of M Bookstore, or online booksellers such as Amazon or Barnes and Noble.
### VI. Course Outline/Weekly Schedule

<table>
<thead>
<tr>
<th>Dates</th>
<th>Tasks</th>
<th>Assignments</th>
<th>Due Dates (Mondays by 11:55 pm, Central time)</th>
</tr>
</thead>
</table>
| Week 1 9/5-9/10/17 | Read Syllabus and Getting Started and Finding Help  
Familiarize yourself with the course and Moodle format  
**Lesson 1 – Orientation to Course and Introduction** | Introductions post (10 points)       | 9/11/17                                      |
| Week 2 9/11-9/17/17 | **Lesson 2 - Air**  
**Air Discussion (10 points)**  
**Weekly Chat (Wednesday 9/13, 8-8:45 pm)**  
**Air Quiz (10 points)** |                                      | 9/18/17                                      |
| Week 3 9/18-9/24/17 | **Lesson 3 - Water**  
Read Chapter 16: Water Pollution, pp. 417-455 in Nadakavukaren.  
Pay attention to the Case Studies: 15-1 through 15-4 and 16-1 through 16-6.  
Quiz and exam questions may be based on case studies.  
**Water Discussion (10 points)**  
**Weekly Chat (Wednesday 9/20, 8-8:45 pm)**  
**Water Quiz (10 points)** |                                      | 9/25/17                                      |
| Week 4 9/25-10/1/17 | **Lesson 4 - Food**  
Read Chapter 9: Food Quality, pp. 255-235 (skip Case Study 9-3) in Nadakavukaren.  
**Food Discussion (10 points)**  
**Weekly Chat (Wednesday 9/27, 8-8:45 pm)**  
**Food Quiz (10 points)** |                                      | 10/2/17                                      |
| Week 5 10/2-10/8/17 | **Exam 1 (covers Air, Water, Food)** |                                      | 10/9/17                                      |
| Week 6 10/9-10/15/17 | **Lesson 5 - Land**  
Read Chapter 17: Solid and Hazardous Waste, pp. 460-461 (17-1 The Great Pacific Garbage Patch) in Nadakavukaren  
**Land Discussion (10 points)**  
**Weekly Chat (Wednesday 10/11, 8-8:45 pm)**  
**Land Quiz (10 points)** |                                      | 10/16/17                                     |
| Week 7 10/16-10/22/17 | **Lesson 6 - Housing** |                                      | 10/23/17                                     |
| Week 8 10/23-10/29/17 | **Lesson 7 - Pests**  
Read Chapter 8: Pests and Pesticides, pp. 187-188 (Case Study 8-1, Avoiding the Bite) and pp. 194-195 (Case Study 8-2, Battling Malaria) in Nadakavukaren.  
**Pests Discussion (10 points)**  
**Weekly Chat (Wednesday 10/25, 8-8:45 pm)**  
**Pests Quiz (10 points)** |                                      | 10/30/17                                     |
<table>
<thead>
<tr>
<th>Week 9</th>
<th>10/30-11/5/17</th>
<th>Exam 2 (covers Land, Housing, Pests)</th>
<th>No Weekly Chat this week</th>
<th>Exam 2 (16 points)</th>
<th>11/6/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 10</td>
<td>11/6-11/12/17</td>
<td>Lesson 8 – Infectious Diseases</td>
<td>Infectious Diseases Discussion (10 points)</td>
<td>Weekly Chat (Wednesday 11/8, 8-8:45 pm)</td>
<td>Infectious Diseases Quiz (10 points)</td>
</tr>
<tr>
<td>Week 11</td>
<td>11/13-11/19/17</td>
<td>Lesson 9 – Chronic Diseases</td>
<td>Chronic Diseases Discussion (10 points)</td>
<td>Weekly Chat (Wednesday 11/15, 8-8:45 pm)</td>
<td>Chronic Diseases Quiz (10 points)</td>
</tr>
<tr>
<td>Week 12</td>
<td>11/20-11/26/17</td>
<td>Lesson 10 - Ethics</td>
<td>Ethics Discussion (10 points)</td>
<td>Weekly Chat (Wednesday 11/22, 8-8:45 pm)</td>
<td>Ethics Quiz (10 points)</td>
</tr>
<tr>
<td>Week 14</td>
<td>12/4-12/10/17</td>
<td>Exam 3, (covers Infectious, Chronic and Ethics and Entire Course)</td>
<td>No Weekly Chat this week</td>
<td>Exam 3 (40 points)</td>
<td>12/11/17</td>
</tr>
<tr>
<td>Week 15</td>
<td>12/11-12/17/17</td>
<td>Finals Week, No Class</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### VII. Evaluation and Grading

The University utilizes plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.000</td>
<td>Represents achievement that is outstanding relative to the level necessary to meet course requirements</td>
</tr>
<tr>
<td>A-</td>
<td>3.667</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>3.333</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.000</td>
<td>Represents achievement that is significantly above the level necessary to meet course requirements</td>
</tr>
<tr>
<td>B-</td>
<td>2.667</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>2.333</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2.000</td>
<td>Represents achievement that meets the course requirements in every respect</td>
</tr>
<tr>
<td>C-</td>
<td>1.667</td>
<td></td>
</tr>
</tbody>
</table>
D+ 1.333
D 1.000 - Represents achievement that is worthy of credit even though it fails to meet fully the course requirements
S Represents achievement that is satisfactory, which is equivalent to a C- or better.

For additional information, please refer to: http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html.

Grades will be determined by the following:

<table>
<thead>
<tr>
<th>Assignments and Quizzes</th>
<th>Points</th>
<th>Percent of course grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductions post</td>
<td>10</td>
<td>3.6</td>
</tr>
<tr>
<td>Discussion Assignments (9 @ 10 points each)</td>
<td>90</td>
<td>32.1</td>
</tr>
<tr>
<td>Quizzes (9 @ 10 points each)</td>
<td>90</td>
<td>32.1</td>
</tr>
<tr>
<td>Exam 1, Part 1 (Air, Water, Food)</td>
<td>10</td>
<td>10.7</td>
</tr>
<tr>
<td>Exam 1, Part 2 (Water, Food)</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Exam 2 (Land, Housing, Pests)</td>
<td>20</td>
<td>7.1</td>
</tr>
<tr>
<td>Exam 3, Part 1 (Infectious, Chronic, Ethics)</td>
<td>30</td>
<td>14.3</td>
</tr>
<tr>
<td>Exam 3, Part 2 (Entire Course)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Total points</td>
<td>280</td>
<td>100</td>
</tr>
<tr>
<td>Current Issues Paper (Extra Credit)</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total points with Extra Credit</td>
<td>295</td>
<td></td>
</tr>
</tbody>
</table>

A letter grade will be determined based on total effort as follows:

<table>
<thead>
<tr>
<th></th>
<th>B+ 87-89 points</th>
<th>C+ 77-79 points</th>
<th>D 60-69 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>95-100 points</td>
<td>B 83-86 points</td>
<td>C 73-76 points</td>
</tr>
<tr>
<td>A-</td>
<td>90-94 points</td>
<td>B- 80-82 points</td>
<td>C- 70-72 points</td>
</tr>
</tbody>
</table>

S: Achievement that is satisfactory will be based on completion of all assignments and receiving a minimum of 70 points.

F (or N): Failure (or no credit) signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2), not completed and there was no agreement between the instructor and the student that the student would be awarded an “incomplete” grade.

Late Work Policy
In order to receive a passing grade (A, B, C, or S) all work must be completed and turned in no later than the due date assigned. You are responsible for checking the Course Outline/Weekly Schedule for exact due dates and times. WORK WILL NOT BE ACCEPTED AFTER THE LAST DAY OF THE SEMESTER except in
extraordinary situations, and only with a prior written agreement between the instructor and the student!

You will lose 25% of the grade points if you do not turn in quizzes, assignments or exams by the deadline without previous permission/arrangement. Exceptions will be made for emergencies. You may be asked to provide proof of such emergencies.

**Course Evaluation**
The SPH will collect student course evaluations electronically using a software system called CoursEval: www.sph.umn.edu/courseval. The system will send email notifications to students when they can access and complete their course evaluations. Students who complete their course evaluations promptly will be able to access their final grades just as soon as the faculty member renders the grade in SPHGrades: www.sph.umn.edu/grades. All students will have access to their final grades through OneStop two weeks after the last day of the semester regardless of whether they completed their course evaluation or not. Student feedback on course content and faculty teaching skills are an important means for improving our work. Please take the time to complete a course evaluation for each of the courses for which you are registered.

**Incomplete Contracts**
A grade of incomplete “I” shall be assigned at the discretion of the instructor when, due to extraordinary circumstances (e.g., documented illness or hospitalization, death in family, etc.), the student was prevented from completing the work of the course on time. The assignment of an “I” requires that a contract be initiated and completed by the student before the last official day of class, and signed by both the student and instructor. If an incomplete is deemed appropriate by the instructor, the student in consultation with the instructor, will specify the time and manner in which the student will complete course requirements. Extension for completion of the work will not exceed one year (or earlier if designated by the student’s college). For more information and to initiate an incomplete contract, students should go to SPHGrades at: www.sph.umn.edu/grades.

**University of Minnesota Uniform Grading and Transcript Policy**
A link to the policy can be found at onestop.umn.edu.

**VIII. Other Course Information and Policies**

**Grade Option Change** *(if applicable)*
For full-semester courses, students may change their grade option, if applicable, through the second week of the semester. Grade option change deadlines for other terms (i.e. summer and half-semester courses) can be found at onestop.umn.edu.

**Course Withdrawal**
Students should refer to the Refund and Drop/Add Deadlines for the particular term at onestop.umn.edu for information and deadlines for withdrawing from a course. As a courtesy, students should notify their instructor and, if applicable, advisor of their intent to withdraw.

Students wishing to withdraw from a course after the noted final deadline for a particular term must contact the School of Public Health Office of Admissions and Student Resources at sph-ssc@umn.edu for further information.

**Student Conduct Code:**
The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence,
threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: Student Conduct Code. To review the Student Conduct Code, please see: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf.

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

Use of Personal Electronic Devices in the Classroom:
Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For complete information, please reference: http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html.

Scholastic Dishonesty:
You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: http://policy.umn.edu/Policies/Education/Education/INSTRUCTORRESP.html.

The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: http://www1.umn.edu/oscai/integrity/student/index.html. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class—e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Makeup Work for Legitimate Absences:
Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see: http://policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html.
**Appropriate Student Use of Class Notes and Course Materials:**
Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see: http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html.

**Sexual Harassment**
"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy: http://regents.umn.edu/sites/default/files/policies/SexHarassment.pdf

**Equity, Diversity, Equal Opportunity, and Affirmative Action:**
The University will provide equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy: http://regents.umn.edu/sites/default/files/policies/Equity_Diversity_EO_AA.pdf.

**Disability Accommodations:**
The University of Minnesota is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center Student Services is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DS at 612-626-1333 or ds@umn.edu to arrange a confidential discussion regarding equitable access and reasonable accommodations.

If you are registered with DS and have a current letter requesting reasonable accommodations, please contact your instructor as early in the semester as possible to discuss how the accommodations will be applied in the course.

For more information, please see the DS website, https://diversity.umn.edu/disability/.

**Mental Health and Stress Management:**
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: http://www.mentalhealth.umn.edu.
The Office of Student Affairs at the University of Minnesota:
The Office for Student Affairs provides services, programs, and facilities that advance
student success, inspire students to make life-long positive contributions to society,
promote an inclusive environment, and enrich the University of Minnesota community.

Units within the Office for Student Affairs include, the Aurora Center for Advocacy &
Education, Boynton Health Service, Central Career Initiatives (CCE, CDes, CFANS),
Leadership Education and Development –Undergraduate Programs (LEAD-UP), the
Office for Fraternity and Sorority Life, the Office for Student Conduct and Academic
Integrity, the Office for Student Engagement, the Parent Program, Recreational Sports,
Student and Community Relations, the Student Conflict Resolution Center, the Student
Parent HELP Center, Student Unions & Activities, University Counseling & Consulting
Services, and University Student Legal Service.

For more information, please see the Office of Student Affairs at

Academic Freedom and Responsibility: for courses that do not involve students
in research:
Academic freedom is a cornerstone of the University. Within the scope and content of
the course as defined by the instructor, it includes the freedom to discuss relevant
matters in the classroom. Along with this freedom comes responsibility. Students are
encouraged to develop the capacity for critical judgment and to engage in a sustained
and independent search for truth. Students are free to take reasoned exception to the
views offered in any course of study and to reserve judgment about matters of opinion,
but they are responsible for learning the content of any course of study for which they
are enrolled.*

Reports of concerns about academic freedom are taken seriously, and there are
individuals and offices available for help. Contact the instructor, the Department Chair,
your adviser, the associate dean of the college, or the Vice Provost for Faculty and
Academic Affairs in the Office of the Provost.

Student Academic Success Services (SASS):  http://www.sass.umn.edu:
Students who wish to improve their academic performance may find assistance from
Student Academic Support Services. While tutoring and advising are not offered,
SASS provides resources such as individual consultations, workshops, and self-help
materials.

*Language adapted from the American Association of University Professors "Joint
Statement on Rights and Freedoms of Students".

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