School of Public Health

Syllabus and Course Information



PubH 6130

Occupational and Environmental Medicine: Principles and Practice Spring/2017

Credits: 2

Meeting Days: Wednesday

Meeting Time: 5:00-7:00 p.m.

Meeting Place: East campus; Mayo 1250

Instructor: Mandel, Baker, Bovard

Office Address: Mayo Building, room 1240

Office Phone: 612 626 9308

Fax: 612 626 4837

E-mail: mand0125@umn.edu

Office Hours: contact by e-mail to set up appointment

I. Course Description

This course will familiarize students with the basic concepts and general information used in the practice of occupational/environmental medicine. This includes exposure- disease relationships, causal inference in occupational/environmental medicine and disease prevention. The course is designed for students majoring in Environmental Health Science in the general program or with a focus on occupational health. Students currently receiving financial support from the NIOSH Training Grant are expected to take this course. Experience in clinical medicine is not a prerequisite.

II. Course Prerequisites

Introductory epidemiology and biostatistics

Introductory exposure science and toxicology desired but not mandatory

III. Course Goals and Objectives

The main goal of PubH 6130 is for students to develop a basic understanding of occupational/environmental disease as it relates to chemical, environmental and physical hazards. Disease pathogenesis, diagnosis and disease prevention will be emphasized.

IV. Methods of Instruction and Work Expectations

Class instruction will rely on didactic lectures, class exercises, team exercises and class presentations. Generally, reading assignments accompany each one-hour lecture. Homework assignments are made infrequently.

V Course Toyt and Pandings

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V. Course Text and Readings

LaDou, J. (Editor). Ocupational and Environmental Medicine, 4th Edition, McGraw Hill, 2007

Rom W.N. and Markowitz S. Environmental and Occupational Medicine, 5^{th} Edition, Little Brown, 2013

 $\hbox{Miller G.W. The Exposome; A Primer. Elsevier Publications, 2014}$

(*Weekly readings are posted the course's Moodle site)

VI. Course Outline/Weekly Schedule

January 18	Course Overview	Mandel
	Science and the News	
January 25	Study and discussion of lead pollution in Flint, M	l Baker, Ling
		Mandel
February 1	Occupational/environmental lung disease	Mandel
February 8	Diagnosis/testing	Mandel
	Occupational/environmental cancer	
February 15	Noise-induced hearing loss	Baker
	Solvents	
February 22	Fitness in the workplace	Bovard
March 1	World Trade Center disaster	Kim
	Hurricane Sandy	
March 8	Dermatology	Baker
	Reproductive toxins	
March 15	Spring Break	
March 22	Occupational toxicology	Roy
March 29	Aging worker	Bovard
April 5	Metal toxicity	Baker
	Pesticides	
April 12	Indoor air pollution	Baker
	Occupational asthma/RADS	
April 19	Health disparities in the workplace	McGovern
April 26	Causal inference in OEM	Maldonado
	Preparation for presentations	
May 3	Class presentations	

VII. Evaluation and Grading

Grading will be based on homework assignments (40%) attendance (20%) and class

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Grading will be based on homework assignments (40%), attendance (20%) and class participation (20%). Another 20% of the grade will be from a final presentation made at the end of the semester. Quizzes may be used and, if so, will be done in combination with homework assignments. It is expected that students will not be absent, as the learning experience for this course depends on individual contributions. If you're not present, you obviously are not able to contribute. If you have an unavoidable absence, let me know as far in advance as possible. Assignment of grades will be S/N (satisfactory/non-satisfactory). For the grade of S, students will need the equivalent of a C grade (≥70%). All homework is due in advance of class on the assigned day.

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

- A 4.000 Represents achievement that is outstanding relative to the level necessary to meet course requirements
- A- 3.667
- B+ 3.333
- B 3.000 Represents achievement that is significantly above the level necessary to meet course requirements
- B- 2.667
- C+ 2.333
- C 2.000 Represents achievement that meets the course requirements in every respect
- C- 1.667
- 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.

Course Evaluation

The course will have electronic evaluations through the SPH evaluation system. The system will send e-mail notifications to students when they can complete thee course evaluations. For students who complete their course evaluations promptly, access to final grades will be given, as soon as the instructor renders the grade. All students will have access to their final grades two weeks after the last day of the semester, regardless of whether they completed their course evaluation. Student feedback on course content and faculty teaching skills are important means for improving our work. Please take the time to complete an evaluation for each of the courses for which you are registered at www.sph.umn.edu/courseeval.

Incomplete Contracts

A grade of "I" will be assigned at the discretion of the instructor when, due to extraordinary circumstances 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 day of class, and signed by both the student and instructor. If "I" is thought to be 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, see www.sph.umn.edu/grades or a link to the policy can be found at: onestop.umn.edu.

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:

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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

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 DRC at 612-626-1333 or drc@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 http://www.osa.umn.edu/index.html.

Academic Freedom and Responsibility: for courses that do <u>not</u> 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

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.*

OR:

Academic Freedom and Responsibility, for courses that 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 and conduct relevant

research. 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.*

When conducting research, pertinent institutional approvals must be obtained and the research must be

consistent with University policies.

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, (Dr Kristin Anderson, SPH Dean of Student Affairs), or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

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

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.

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