

PubH 6150

Interdisciplinary Evaluation of Occupational Health and Safety Field Problems - Spring 2017

Credits: 3
Meeting Days: Tuesdays
Meeting Time: 10:10-1:10
Meeting Place: Mayo 1250
Instructor: Susan Arnold PhD, CIH, FAIHA
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Fax: None
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Office Hours: Please call or email for an appointment.

I. Course Description

This course focuses on developing and applying an interdisciplinary team approach and skills to recognize, evaluate and control occupational health and safety field problems.

II. Course Prerequisites

Environmental Health Sciences student or with instructor permission

III. Course Goals and Objectives

Course goals:

1. Understand/apply interdisciplinary team roles and functions of occupational health and injury/safety professionals in evaluating occupational health and safety field problems.
2. Apply concepts of hazard recognition, evaluation and control.
3. Understand/apply concepts of Workers' Compensation and use of Workers' Compensation data to identify injury and illness trends, evaluate and address occupational health and safety field problems.
4. Understand how to effectively communicate evaluation results and recommendations to workplace stakeholders and interdisciplinary team members.

Course objectives

1. Interdisciplinary teams will perform workplace walk-throughs to assess, evaluate, and prioritize occupational field problems.
2. Interdisciplinary teams will apply concepts of hazard recognition, evaluation and control to field problems.
3. Interdisciplinary teams will write a report and present evaluation findings and recommendations to workplace stakeholders and interdisciplinary team members.

IV. Methods of Instruction and Work Expectations

Methods of Instruction

- Interactive class discussion, case studies related to typical field problems in work settings, field trips
- Subject matter-specific guest speakers
- Student self-directed activities related to projects and assignments
- Individual and team evaluations of team building roles and skills

Work Expectations

Attend and actively participate in all class sessions. If you plan to be absent from class, please communicate this information to me at least 24 hr prior to your absence. More than one excused absence will result in a loss of 5 pts for each missed class. Each unexcused absence will result in a loss of 10 points from your grade.

Read the assigned materials BEFORE YOU COME TO CLASS. Class time will be spent applying them, in a research-to-practice environment.

Complete assignments on time. For each day that an assignment is late, you will lose 20% of the value of the assignment.

Participate in group activities, both in class and outside of the formal class meeting time.

Field Trip Expectations

Dress appropriately when visiting workplaces. In general, no skirts or dresses, loose clothing scarves, ties, necklaces, dangling earrings, bracelets, pins, or rings, etc. are allowed. Sturdy, closed-toed shoes may be required. Some locations may call for professional dress. Keep in mind that some workplace settings may be dirty; do not wear anything that cannot be cleaned. Do not bring valuables or large purses or backpacks.

Some worksites may require use of personal protective equipment

NOTE: If you are not properly attired at the start of the field trip, you will not be able to participate in any of the activities. This will cause you to lose 5 points, per occurrence, from your course grade. If personal protective equipment is not provided at the worksite, you are responsible for providing the proper equipment. Bring photo identification (e.g. driver's license).

V. Course Text and Readings

- Syllabus
- Course outline and weekly schedule.
- Readings specific to work place and identified/provided by groups

- Other Resources

Strunk, William, Jr. Elements of Style, Fourth Edition, New York: Create Space, 2010. (Excellent guide to the use of English language and avoiding various pitfalls)

VI. Course Outline/Weekly Schedule and Other Documents

These items are posted on Moodle:

- 6150 syllabus
- Course Outline/Weekly Schedule
- Pre-tour Presentation Grade Criteria & Post-tour Discussion Guidelines
- Final Report and Presentation Guidelines and Grade Criteria
- Various handouts and selected readings TBD

I will update the site throughout the semester, so check it regularly.

VII. Evaluation and Grading

Evaluation and grading is based on a total of 400 points from the following sources:

Assignments:

- **IRB assignment (10 points)**

Each student must complete the online Human Subjects tutorial prior to data collection for the team project. You must achieve at least a 90% passing score. If your score is lower than 90%, retake the test until you achieve at least 90%.

- **Class Participation (40 points)**

Each student will be responsible for escorting and introducing a guest speaker.

- **Pre-Tour Presentation of assigned tour. (25 points) *The purpose of this assignment is to prepare for the tours.***

Pre-tour Presentation. Each student and group will have 30 minutes for the presentation. Assume you are occupational health and safety consultants who have been called by the company to conduct a site visit and consult on the most significant hazards at the worksite. In preparation for your site visit, you do a background search. What does this company do? What are the major products/processes (food processing/packaging facilities, newspaper publishers, etc.)? What is the history of this company? What are you anticipating as primary concerns about this type of work environment? Consider physical, chemical, biological, ergonomic, and psycho-social hazards. Find one OSHA standard or guideline that is particularly relevant to this worksite. Describe why this standard or guideline is particularly important to this industry. For example, if we were touring a healthcare facility, you would describe the relevance of and compliance with OSHA's Bloodborne Pathogens standard.

- **Post-Tour Presentation of assigned tour (75 points) Emphasizes focused post-tour discussion evaluating hazards and controls found on the field tours.** Consider who led the tour (the person's role in the company can make a difference in what was viewed during the tour); the tour leader's primary health and safety problem; and a general description of the worksite and process flow. Address the relevant types of hazards (physical, chemical, biological, ergonomic, psycho-social) noting at least two hazards per category: 1) Identify/prioritize these hazards and support your position; 2) Discuss what employer controls are currently in place and assess their effectiveness and support your position; 3) Recommend prevention/controls as appropriate; 4) Discuss how you might communicate recommendations to the employer; 5) Discuss observations about the health and safety team if it exists;

6) Discuss the overall quality of the tour.

- **Team Project Problem Statement (20 points)**

Turn in one copy per group. Briefly explain the purpose of your project. Think of the "w" questions: who, what, why, where, etc. to guide your description.

- **Post a summary of a current or emerging issue (15 points)**

Identify a current or emerging OH&S issue in the news or publication (e.g. professional or peer reviewed journal). Post a short summary (1 paragraph) on Moodle and discuss why you selected it. [Possible questions to address in your summary: Why/How is this relevant to OH&S and what about it interests you? How will it impact the profession? How can the profession contribute to addressing the issue?]

- **Comment on 2 other postings of current or emerging issues (15 points)**

Select two postings (other than your own) and comment on them. Do you support your colleagues' positions on the issue?

- **Problem Specific Report (maximum 100 points)**

Directions and content for this report are included in the Final Report and Presentation Guidelines and Grade Criteria posted on Moodle. Submit one e-copy of your report with the hard copy. Although you are working on these reports as a team, each member may be writing a different section. **Read the report as a whole before submission.** The report should flow logically from one section to the next. Your **will** receive comments on your report. Your group will be expected to make necessary changes (or explain why you choose not to make the changes). You will be graded on the first report you hand in; however, you have the opportunity to improve your grade when you turn it in on the final class day. **The first copy you submit is NOT a rough draft or outline; it is your final report.** The advantage is that you will have an opportunity to respond to your critique, and your group has the chance to improve your grade. Remember, these reports are submitted to your company so they must be professional and accurate. Groups may receive an incomplete grade until necessary revisions are made to the final report and the report is acceptable to be sent to the company.

- **Team Presentations of the Problem Specific Report to Employer (maximum 100 points)**

Directions and content for this report are included in the Final Report and Presentation Guidelines and Grade Criteria posted on Moodle. Focus on what is important for management. Each team is responsible for providing handouts of their slides for all students and faculty at the beginning of the presentation. This is a professional presentation to management so please dress appropriately.

Grading Options

In general, EnHS students must take this class A/F. S/N option will be expected to complete all assignments and receive a minimum of 70% on each to receive a passing score. A/F option must complete all assignments to a C level (70%) and letter grade will be determined by total effort as follows:

Grading is based on a total of 400 possible points achieved during the semester.

A = 400-360 points and represents achievement that is outstanding relative to the level necessary to meet course requirements.

B = 320-359 points and represents achievement that is significantly above the level necessary to meet course requirements.

C = 280-319 points and represents achievement that meets the minimum course requirements.

No pass below 70%

Course Evaluation

Beginning in fall 2008, the SPH will collect student course evaluations electronically using a software system called CoursEval: www.sph.umn.edu/courseeval. 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. Disability Services (DS) 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 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>.

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. *[Customize with names and contact information as appropriate for the course/college/campus.]*

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

PubH 6150 Roles

You will have two main contacts for your project: your faculty facilitator and your company contact.

The **Faculty Facilitator** in PubH 6150 agrees:

1. To meet by mutually agreed-upon appointment with the student team a minimum of three times prior to assigned tour date and prior to presentation to "management."
2. To facilitate identification of problem for investigation.
3. To be a student resource for reference materials.
4. To serve as a mediator for team process.
5. To act as liaison with company prior to all communications between student team members and on site personnel.

6. To review the final paper and attend the final presentation.

The **Company Contact** in PubH 6150 agrees:

1. To provide a safe and healthy environment for the onsite experience.
2. To facilitate identification of three unresolved problems or problems the company has resolved that may be analyzed during a short time period (fewer than 15 weeks). The students will then choose one of these problems for their group project.
3. To negotiate reasonable time and resources for the investigation with the faculty facilitator.
4. To feel free to contact the faculty facilitator at any time.
5. To be available for: At least two onsite visits, one with the student team and faculty facilitator, and one with the entire class; as needed by phone /email/in-person as the student team addresses the problem/issue during the semester.

Human Subjects

During your coursework for PubH 6150, you may have contact with employees at the site of your group project. The University of Minnesota Institutional Review Board (IRB) reviews course protocols to ensure that any human subjects are not placed at undue risk, and that they give uncoerced, informed consent to their participation. It is important that you are aware of your responsibilities in the protection of human subjects for this course.

- We ask that companies delete any personal identifiers in the data they share with you as you complete your group project; however, if these personal identifiers are not removed, you may still review the data, but you may not record any personal identifiers.
- Any data reported must be in an aggregate or summary form, and only published in class.
- Please destroy your data at the end of the semester, with the exception of copies of your final report for the instructors, a copy for the company, and a copy for your files.
- If your group goes beyond what is covered in the class protocol IRB application (e.g., contact with employees, surveys to them, etc.), your group must **FIRST** complete, and have **APPROVED**, your own IRB application.
- As a course requirement, you must complete the online informed consent tutorial and review the human subject's handbook (directions on the following page). This assignment will also benefit you if you work as a research assistant on any project that has contact with human subjects, as documentation of this training is now required for most projects.
- Please contact the instructor or your faculty facilitator if you have any questions regarding these requirements.

Human Subjects Assignment

To complete the online informed consent training:

[Collaborative Institutional Training Initiative \(CITI\) basic course:](#)

<https://support.citiprogram.org/customer/portal/articles/163300-how-do-i-enroll-in-a-citi-course-for-the-first-time->

Once you have completed the training and demonstrated a sufficient level of comprehension, your training record will be updated. Please forward the email (or some other evidence of successful completion)

You are also responsible for reviewing the “Protecting Human Subjects Guide,” which is available online

<http://www.research.umn.edu/irb/download/Protecting%20Human%20Subjects%20Guide.pdf>

WEEK	Date	Topic
Week 1	1/17/2017	Overview and Expectations. Working in Interdisciplinary Teams Research to Practice in H&S
Week 2	1/24/2017	Conducting A Basic Characterization Following A Systematic Approach Some Useful Tools
Week 3	1/31/2017	Pre-Site Tour Presentation 1 and 2 Strategic Safety Communication: The GAMM Model. Report Writing: The Good, The Bad and The Ugly
Week 4	2/7/2017	Health Care Hygiene And Site Visit 1: Fairview Hospital Guest speaker: Mr. Andy Striefel
Week 5	2/14/2017	Ergonomics in Practice and Making the Business Case Guest speaker: Stephen Gutmann, PhD
Week 6	2/21/2017	Post Site-Tour Presentations 1 Estimating Exposure, Assessing the Risks
Week 7	2/28/2017	Site Visit 2: Caterpillar Paving Guest speaker: Mr. Kevin Kitchen
Week 8	3/7/2017	Post Site-Tour Presentations 2, Pre-site Visit 3 Cockpit Resource Management – An Interdisciplinary Approach to Problem Solving
Week 9	3/13/2017	No Class - Spring Break
Week 10	3/21/2017	Pre-Site Tour 4 and Confirmation Bias and Managing Controversy
Week 11	3/28/2017	Presentation and Site Visit 3 – TSI Guest speaker: Dr. Sreenath Avula PhD
Week 12	4/4/2017	Site Visit 4 – Cummins Power Guest speaker: Mr. Ben Schoenbauer
Week 13	4/11/2017	Post-Site Tour Presentation 3 And 4, In Class Project Time
Week 14	4/18/2017	Consulting in EH&S Guest speaker: Mr. Neil Carlson, CIH

Week 15	4/25/2017	Chemical Hazard Communication in a Product Stewardship Context Guest speaker: Robert Skoglund/Robert Roy
Week 16	5/2/2017	Team presentations