I. Course Description

The seminar format enables students to understand the realm of and potential risk factors for occupational safety problems, and to identify potential strategies for prevention and control.

II. Course Prerequisites

Occupational health and safety students; other students with relevant interests

III. Course Goals and Objectives

To provide the opportunity for students to develop an awareness of the diversity of occupational safety problems; to facilitate an understanding of risk factors associated with these problems; and to identify potential strategies for prevention and control.

Detailed Learning Objectives

At the completion of this course, students will be able to:

1. Identify hazards and injury problems associated with specific occupations;
2. Discuss approaches in the analyses of injury and safety problems;
3. Develop strategies for prevention and control of selected hazards.

How does the course relate to Public Health?

Unintentional injuries continue to rank number one in terms of working years-of-life lost in the United States. Combined sources of injury data indicated that, in 2006, unintentional occupational
injuries accounted for nearly 5,000 deaths and 3.7 million disabling injuries; these injuries resulted in 80 million lost workdays during 2006, and an estimated 65 million future work days lost. The total direct and indirect costs of work-related injuries were conservatively estimated at $165 billion. Workers in agriculture, mining, construction, and the transportation/public utilities industries are at greatest risk for occupational injuries.

In addition to these considerations, is a need to recognize the true boundaries of the work environment. For example, the fact that up to 40 percent of all occupational fatalities in the United States are associated with motor vehicle crashes, the major cause of occupational death, identifies a need for occupational injury prevention and control programs that incorporate a scope beyond the physical confines of a workplace. Of further concern is the fact that time lost from off-the-job injuries is frequently a greater problem than for injuries incurred on-the-job and, also, results in significant costs to both the employers and employees. There is also evidence that children and adolescents experience occupational injuries disproportionately. While the Fair Labor Standards Act, which includes federal provisions for child labor protection, generally applies to those under the age of 16 years, 14 and 15 year-olds can be employed in many retail and service jobs in agriculture, children under the age of 12 years, can work on their parents’ farms or on farms small enough to be excluded from the provisions of the act and in certain seasonal work. Women and workers of color, among others, are also at high risk in certain occupations.

Intentional injuries are also recognized as a major problem in the work environment, accounting for the third major cause of occupational death, overall, exceeded only by motor-vehicle and fall-related deaths; it is also the second major cause of occupational fatality for women. Limited data have been available from population-based studies of non-fatal intentional injuries. However, evidence from recent research conducted, has revealed significant problems pertinent to non-fatal violence among certain occupational groups that result in major physical, psychological, and sociological consequences to the victims and high financial costs both to the victims and to the employers.

IV. Methods of Instruction and Work Expectations

Seminar Format

Student performance requirements and relevant weight toward a student's final grade.

Seminar attendance 35%
Participation in discussion 35%
Written one-two page summary/critique of seminars (6 required) 30%

Provide a written summary of the primary points identified in the seminar presentation and discussion. Include a critique of the presentation and discussion with regard to their relevance to safety in the workplace and the overall learning objectives. Forms are provided. Hand in respective critiques during the following seminar periods.

Grading is A/N, S/N, or audit 100%
V. Course Text and Readings

Required Reading:

Supplemental/References:
Refer, also, to PubH 6-120 required readings and supplemental textbooks.


VI. Course Outline/Weekly Schedule

**NOTE:** The following lectures provide content that facilitate analysis of injury problems and development of strategies for prevention and control. Using a conceptual approach that incorporates examples of injury problems, programs that consider the worker and others can be developed. Based on the model identified in Injury in America, a multidisciplinary approach that includes Epidemiology, Bioengineering, Acute Care, Rehabilitation and Health Promotion is included. Injury problems presented during this course serve as examples for applying an epidemiologic approach and considering appropriate strategies (e.g., engineering, education, legislation) for prevention and control.

**SCHEDULE: Example:**

<table>
<thead>
<tr>
<th>Day/Date</th>
<th>Topic</th>
<th>Faculty</th>
<th>Time (a.m.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday</td>
<td>Course Introduction Overview: Historical Perspective; Basic Theory, Epidemiological Approach; Injuries: A National Perspective</td>
<td>S. Gerberich</td>
<td>12:20-2:15 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Minnesota Work-Related Injuries and Associated Costs</td>
<td>Zaidman</td>
<td>12:20-2:15 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Work-Related Violence</td>
<td>Sanders</td>
<td>12:20-2:15 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>The Construction industry: The Injury Problem and Prevention and Control Strategies</td>
<td>Picha</td>
<td>12:20-2:15 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>The Trucking Industry: Safety Issues and Prevention Approaches</td>
<td>Pollock</td>
<td>12:20-2:15 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Corporate Safety: Considerations and Strategies for Maintaining a Safe Work Environment</td>
<td>Olmstead</td>
<td>12:20-2:15 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Aviation Risk Factors and Risk Management</td>
<td>Braunig</td>
<td>12:20-2:15 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Transportation Injuries and Fatalities: Laboratory and Other Research Approaches</td>
<td>Ward</td>
<td>12:20-2:15 pm</td>
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VII. Evaluation and Grading

Refer, also, to Methods of Instruction and Work Expectations

A. Course Requirements and Evaluation (University of Minnesota criteria):

A/F
4.00 = A Represents achievement that is outstanding relative to course requirements
3.67 = A-
3.33 = B+
3.00 = B Represents achievement that is significantly above course requirements
2.67 = B-
2.33 = C+
2.00 = C Represents achievement that meets course requirements in every respect
1.67 = C-
1.33 = D+
1.00 = D Represents achievement that fails to meet fully the course requirements but is worthy
of credit

0  = F* Represents failure and signifies that the work was either completed but at a level of achievement not worthy of credit or was not completed and no agreement was made between the instructor and the student to award an Incomplete (I)

S/N

S = 2.00 or above
N* = below 2.00

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) 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 Student Services Center at sph-ssc@umn.edu for further information.

Student Conduct, Scholastic Dishonesty and Sexual Harassment Policies
Students are responsible for knowing the University of Minnesota, Board of Regents’ policy on Student Conduct and Sexual Harassment found at www.umn.edu/regents/polindex.html.

Students are responsible for maintaining scholastic honesty in their work at all times. Students engaged in scholastic dishonesty will be penalized, and offenses will be reported to the Office of Student Academic Integrity (OSAI, www.osai.umn.edu).

The University’s Student Conduct Code defines scholastic dishonesty as “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; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.”

Plagiarism is an important element of this policy. It is defined as the presentation of another’s writing or ideas as your own. Serious, intentional plagiarism will result in a grade of “F” or “N” for the entire course. For more information on this policy and for a helpful discussion of preventing plagiarism, please consult University policies and procedures regarding academic integrity: http://writing.umn.edu/tww/plagiarism/.

Students are urged to be careful that they properly attribute and cite others’ work in their own writing. For guidelines for correctly citing sources, go to http://tutorial.lib.umn.edu/ and click on “Citing Sources”.

In addition, original work is expected in this course. It is unacceptable to hand in assignments for this course for which you receive credit in another course unless by prior agreement with the instructor. Building on a line of work begun in another course or leading to a thesis, dissertation, or final project is acceptable.

If you have any questions, consult the instructor.
Disability Statement

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have a documented disability (e.g., physical, learning, psychiatric, vision, hearing, or systemic) that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact Disability Services to have a confidential discussion of their individual needs for accommodations. Disability Services is located in Suite180 McNamara Alumni Center, 200 Oak Street. Staff can be reached by calling 612/626-1333 (voice or TTY).