Time:  Wednesday;  1 to 4 pm;  this may be partially offered on-line;  please consult D2L notes week to week to confirm schedule

Location  Room A120  Drachman

Instructor:  Dr. Terry Stobbe, CSP, CIH, CPE

Office Hours:  Immediately before and after class; otherwise by appointment

Teaching Assistant:  Gilbert Rivera

Course Description:  Fundamentals of occupational safety, emphasizing regulatory requirements and best-practices targeted to eliminate major sources of occupational injuries. Hazard identification, behavioral safety, and incident investigation will be discussed.  In addition, the basic concepts of workplace ergonomics will be presented.

Course Prerequisites:  An open mind, and an ability to think logically

Course Learning Objectives:  Students will learn the basic concepts of industrial safety and ergonomics, how accidents and injuries/diseases affect workers, their family, and their workplace, where to look for technical information about these subjects, and how to evaluate a workplace from the perspective of a safety/ergonomics professional. The importance of perception in safety decision making will be explored. This will include learning the classic OHS approach of anticipation, recognition, evaluation and control of workplace hazards. The business side of safety will be examined. Safety costs money – but safety can also save money. Since the system is driven by money, an OSH professional’s ability to correctly determine and present the cost and savings aspects of safety related projects is critical to their success. Various approaches to cost determination and the derivation of cost savings (looking at direct costs along with indirect costs such as training, turnover, absenteeism, decreased quality, lower productivity, etc.) will be considered. As the course topics are presented, the cost/savings aspects will be appropriately pointed out. Students will learn about how to address the ethical issues involved in workplace safety and in the balancing of safety and health with cost in the workplace.

MPH Competencies Covered:

A.  ANALYTICAL SKILLS:
A.  1.  Defines a problem
A.  4.  Evaluates the integrity and comparability of data and identifies gaps in data sources
A.  5.  Understands how the data illuminates ethical, political, scientific, economic, and overall occupational safety and health issues
A.5.*  Understands the qualitative and quantitative aspects of the creation of workplace OHS hazards.
A.5.** Understands the physiological, psychological, and toxicological contributions to workplace stressors on the human body.
A.5.*** Can identify basic engineering and administrative controls appropriate to the reduction/elimination of workplace hazards and stressors.

B. COMMUNICATION SKILLS:
B. 1. Communicates effectively both in writing and orally (unless a handicap precludes one of those forms of communication)
B. 5. Leading and participating in groups to address specific issues, including ability to work in teams, span organizational boundaries, and cross systems

C. POLICY DEVELOPMENT/PROGRAM PLANNING SKILLS:
C. 6. Identifying public health laws, regulations, and policies related to specific programs

D. CULTURAL SKILLS:
D. 2. Interacting competently, respectively, and professionally with persons from diverse backgrounds
D. 4. Developing and adapting approaches to occupational health and safety problems that take into account cultural differences

E. BASIC PUBLIC HEALTH SCIENCE SKILLS:
E. 3. Applying the behavioral and social sciences, biostatistics, epidemiology, and industrial & environmental health to the prevention of chronic diseases and injuries
E. 4. Understanding of the historical development and structure of state, local, and federal regulatory agencies concerned with occupational health and safety

F. FINANCIAL PLANNING AND MANAGEMENT SKILLS:
F. 3. Developing strategies for determining priorities
F. 4. Monitoring program

ABET Student outcomes addressed by course

Anticipate workplace stressors
Recognize workplace stressors
Evaluate workplace stressors
Develop control plans for workplace stressors
Understand the toxic and physiological effects of workplace stressors
Specify correct PPE
Correctly apply legal standards to workplace situations

Course Notes: Some notes will be handed out in class and some will be available thru D2L

Recommended Texts/Readings: The text is “Safety and Health for Engineers” Brauer, 2nd edition; Wiley ---other readings will be available via the library and/or D2L

Course Requirements: Complete all the assignments in a timely manner; participate both in class discussions and in the on-line discussion for that part of the course. Specific directions for participation in various parts of the on-line class will be given (on D2L) – please read them. Assignments should be turned in via the dropbox on D2L

Grading/Student Evaluation: Course assignment values:
Final 16% (comprehensive)
Midterm 12%
Papers 15%
Homework 10%
Projects 15%
Quizzes 7%
Class Particip 5%
Weekly proj rep 5%
Personal safety rep 15%

These values may be adjusted later in the semester

Class Attendance/Participation: All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion. Absences pre-approved by the UA Dean of Students (or Dean’s designee will be honored.)

Course Schedule:

<table>
<thead>
<tr>
<th>IN class</th>
<th>Week #</th>
<th>Topic area</th>
<th>Text Readings (1)</th>
<th>assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON line</td>
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INTRODUCTION TO “SAFETY”

<table>
<thead>
<tr>
<th>IN</th>
<th>Week 1</th>
<th>Intro, Safety philosophy</th>
<th>C1, C2,</th>
<th>see D2L for assignment</th>
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<tbody>
<tr>
<td>IN</td>
<td>Week 2</td>
<td>Business side of Safety</td>
<td>C3, C4, C34, C35</td>
<td>see D2L</td>
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<tr>
<td>IN</td>
<td>Week 3</td>
<td>OSHA &amp; Wrk Cmp</td>
<td>C4, C5, C6, C8</td>
<td>see D2L</td>
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<tr>
<td>ON</td>
<td>Week 4</td>
<td>Specific hazards</td>
<td>C12</td>
<td>see D2L</td>
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<tr>
<td>IN</td>
<td>Week 5</td>
<td>OSHA &amp; Wrk Cmp</td>
<td>C4, C5, C6, C8</td>
<td>see D2L</td>
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<tr>
<td>IN</td>
<td>Week 6</td>
<td>Prod Liab, Acc Inv</td>
<td>C7, C37</td>
<td>see D2L</td>
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<tr>
<td>IN</td>
<td>Week 7</td>
<td>Specific hazards</td>
<td>C9-11, C13</td>
<td>see D2L</td>
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<tr>
<td>IN</td>
<td>Week 8</td>
<td>IH/Tox/Conf Spc</td>
<td>C24, C25</td>
<td>see D2L</td>
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<tr>
<td>IN</td>
<td>Week 9</td>
<td>Noise, PPE</td>
<td>C23, C28</td>
<td>see D2L</td>
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<tr>
<td>IN</td>
<td>Week 10</td>
<td>Specific Hazards</td>
<td>C12, C14-19</td>
<td>see D2L</td>
</tr>
<tr>
<td>IN</td>
<td>Week 11</td>
<td>Specific Hazards</td>
<td>C12, C14-19</td>
<td>see D2L</td>
</tr>
<tr>
<td>IN</td>
<td>Week 12</td>
<td>Specific Hazards</td>
<td>C12, C14-19</td>
<td>see D2L</td>
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<tr>
<td>ON</td>
<td>Week 13</td>
<td>Stress, Ergo intro</td>
<td>C31-33+</td>
<td>see D2L</td>
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<tr>
<td>ON</td>
<td>Week 14</td>
<td>Ergonomics</td>
<td>C33+</td>
<td>see D2L</td>
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<tr>
<td>IN</td>
<td>Week 15</td>
<td>Ergonomics</td>
<td>C33+</td>
<td>see D2L</td>
</tr>
<tr>
<td>IN</td>
<td>Week 16</td>
<td>Ergonomics</td>
<td>C33+</td>
<td>see D2L</td>
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Required Statements:

Communications: You are responsible for reading emails sent to your UA account from your professor and the announcements that are placed on the course web site. Information about readings, news events, your grades, assignments and other course related topics will be communicated to you with these electronic methods. The official policy can be found at: http://www.registrar.arizona.edu/emailpolicy.htm

Disability Accommodation: If you anticipate issues related to the format or requirements of this course, please meet with me. I would like us to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; drc.arizona.edu) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations. The official policy can be found at: http://catalog.arizona.edu/2014%2D15/policies/disability.htm

Academic Integrity: All UA students are responsible for upholding the University of Arizona Code of Academic Integrity, available through the office of the Dean of Students
and online: The official policy found at: http://deanofstudents.arizona.edu/codeofacademicintegrity

**Classroom Behavior:** The Dean of Students has set up expected standards for student behaviors and has defined and identified what is disruptive and threatening behavior. This information is available at: http://deanofstudents.arizona.edu/disruptiveandthreateningstudentguidelines

Students are expected to be familiar with the UA Policy on Disruptive and Threatening Student Behavior in an Instructional Setting found at: http://policy.arizona.edu/disruptive-behavior-instructional and the Policy on Threatening Behavior by Students found at: http://deanofstudents.arizona.edu/sites/deanofstudents.arizona.edu/files/Disruptive_threat_bklt_2012.pdf

**Grievance Policy:** Should a student feel he or she has been treated unfairly, there are a number of resources available. With few exceptions, students should first attempt to resolve difficulties informally by bringing those concerns directly to the person responsible for the action, or with the student's graduate advisor, Assistant Dean for Student and Alumni Affairs, department head, or the immediate supervisor of the person responsible for the action. If the problem cannot be resolved informally, the student may file a formal grievance using the Graduate College Grievance Policy found at: http://grad.arizona.edu/academics/policies/academic-policies/grievance-policy

**Grade Appeal Policy:** http://catalog.arizona.edu/2014-15/policies/gradappeal.htm

**UA Smoking and Tobacco Policy:**
The University's "Smoking and Tobacco Policy" is designed to promote the health and wellness of all members of the University community, including visitors to campus, and it will prohibit the use of tobacco- and nicotine-containing products on property owned or controlled by the UA. This includes the main campus, the Arizona Health Sciences Center, the Phoenix Biomedical Campus, UA South, all satellite campuses, University vehicles, and any property leased by the UA. Smoking cessation aids, such as nicotine gum, patches, and nasal sprays, will be permitted, but all other forms of tobacco or nicotine - including pipes, cigars, cigarettes and e-cigarettes, all types of smokeless tobacco, and water pipes - will be prohibited. The latest version of the policy is available at: http://policy.arizona.edu/sites/default/files/Tobacco-Free.pdf

**Syllabus Changes:** Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate.

**Plagiarism:** What counts as plagiarism?
- Copying and pasting information from a web site or another source, and then revising it so that it sounds like your original idea.
- Doing an assignment/essay/take home test with a friend and then handing in separate assignments that contain the same ideas, language, phrases, etc.
- Quoting a passage without quotation marks or citations, so that it looks like your own.
- Paraphrasing a passage without citing it, so that it looks like your own.
- Hiring another person to do your work for you, or purchasing a paper through any of the on- or off-line sources.