CSTM 448  
Construction Occupational Safety & Health  
3 Credit Hours  
Spring Semester 2017

Instructor: Dr. C. Ray Diez  
Office: 135 Knoblauch Hall  
Phone: 298-1091

Office Hours: 9:30 - 10:30 M,T,W,Th  
e-mail: cr-diez@wiu.edu

General Course Information:

A. Catalog Description: A study of the Federal OSHA Act as it applies to the construction industry. Beyond federal regulations, the course includes accident prevention plans, safety education, and documentation presentation.


Course Objectives:

A. To introduce and orient students to typical construction safety problems and concerns.

B. To provide students with common construction safety management tools and techniques.

C. To engage students in discussion, debate, and activities related to construction safety.

D. To provide students with the opportunity to structure an accident safety plan and a safety program for a construction organization of their choice that could be used as a guide for current or future professional activities.

E. To take students on a safety tour of local construction sites (if available).

F. To provide students the opportunity to complete a safety inspection or a follow-up safety inspection of local construction site(s).

G. To provide students the opportunity to teach a 5 minute safety topic or give a "toolbox talk".

H. Have student complete a recordkeeping activity using the OSHA 300 recordkeeping forms.

Method of Instruction:

The primary method of instruction will be through dialogue based on the outlined topics. This will be accomplished through class discussions, guest speakers, observation, readings, and individual and/or group project activities, construction site tours, and both oral and written reports.

Course Requirements:

A. Each student is expected to read all assignments.

B. Each student is expected to attend class lectures, sessions with speakers, and exams when scheduled in order to qualify for the OSHA 30 hour card. You cannot miss more than 5 classes to qualify and receive a passing grade.

   FINAL EXAMINATION -   TTh @ 8AM Tuesday May 9, 2017 @ 8:00 AM

C. Each student will be required to write abstracts of three articles pertaining to the field of construction safety
and selected from periodicals pertinent to the profession. Each abstract is not to exceed one single-spaced, typewritten page or two double-spaced, typewritten pages. At least one abstract article must be taken from electronic media. Due dates for the journal critiques are as follows:

- February 9: A topic from Weeks 1-5
- March 9: A topic from Weeks 6-10
- April 6: A topic from Weeks 11-16

D. All students are expected to plan and participate in a group activity. The topic may pertain to the assignment identified in subpart E below, a safety audit of a construction site, or may be a five-minute safety topic. The groups will be the same as required for that assignment.

E. All students are required to plan and structure a safety program and an accident safety plan for a construction environment of their choice. The criteria will be established by the instructor. This can be completed by an individual or in small groups.

F. The student will complete all assigned individual and group projects/activities.

G. The students will be evaluated in the following manner:

- a. Quizzes and Class Participation 5%
- b. Reports and Journal Critiques 15%
- c. Individual and Group Projects/Activities 20%
- d. First Examination 20%
- e. Second Examination 20%
- f. Final Examination 20%

*WIU Policy - WIU policy – A temporary symbol of I (Incomplete) for a course may be given only when a student, due to circumstances beyond his or her control, has been unable to complete the course requirements within the official limits of the term. The circumstances must be documented to the instructor’s satisfaction.

H. Grading Scale:
The following +/- grading scale will be used for this course.

A = 92-100
A- = 90-91
B+ = 88-89
B = 82-87
B- = 80-81
C+ = 78-79
C = 72-77
C- = 70-71
D+ = 68-69
D = 62-67
D- = 60-61
F = 59 and below

Course Outline: (Tentative, final scheduling is being completed).

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>pgs &amp;/or site</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>New Introduction to OSHA: Why is OSHA important to you? What Rights do you have under OSHA? What responsibilities Does your employer have under OSHA? What do the OSHA Standards say? How are OSHA inspections conducted? Where Can you go for help?</td>
<td>Powerpoint &amp; Handouts Discussion OSHA.gov/dte/index.html</td>
</tr>
</tbody>
</table>
2 General Industry Standards overview  
Focused Inspections  

21-144  
Powerpoint

3 Safety and Health programs  
Fall Protection  

Powerpoint  
Subpart M 319-338

4 Stairways & Ladders  
(fall protection)  

Subpart X 427-432  
Subpart L 299-318

5 Steel Erection  
(fall protection)  
Fire Protection  

Subpart R 371-382  
Subpart F 243-256

6 Test One -  
Weeks 1-5  

Motor vehicles  
(struck by, caught in between)  
& Rollover Protective Structures; Overhead  
Protection  

Subpart O 355-370  
Subpart W 417-426

7 Electrical & Power Distribution  

Subpart K 283-298  
Subpart V 409-416  
Subpart I 271-278

8 Concrete and Masonry Construction (struck by)  
Welding  

Subpart Q 367-370  
Subpart J 279-282

9 SPRING BREAK

10 Cranes (caught in between, struck by)  
Rigging  

Subpart N 339-346  
Subpart H 259-270

11 Test Two -  
Weeks 6-10  

Excavations (caught in between)  

Subpart P 351-366

12 Confined Space  
Personal Protective Equipment  

Subpart C 153-156  
Subpart E 239-242

13 Personal Protective Equipment  
Hazard Communication  

Subpart E 239-242  
Subpart D 157-238  
Gen. Ind.  121-132

14 Health Hazards  
Signs, signals, & barricades  

Subpart D 157-238  
Subpart Z 435-480  
Subpart G 257-258

15 Diving  
Underground Construction, Caissons, Cofferdams,  
and Compressed Air  

Subpart Y 433-434  
Subpart S 383-400

16 Demolition  
Blasting & Explosives  

Subpart T 401-402  
Subpart U 403-408

FINAL EXAMINATION -  
Weeks 11-16  
-  
TTh @ 8AM  
Tuesday May 9, 2017 @ 8:00 AM

PLUS --- Safety Inspection(s)/Audit(s) --- TIME(S) TO BE ARRANGED

General Considerations:
A. Assignments should be completed on time, as scheduled, and according to criteria established by the instructor.

B. The instructor will be available during posted office hours for general assistance, although a prior appointment is desired. For assistance other than posted times, please make an appointment with the instructor.

C. Smoking is NOT permitted in Knoblauch Hall.

D. Safety glasses and hard hats will be required for field trips and construction site audits/inspections.

E. Should a problem occur, students should speak to their instructor first. If the problem is not resolved, meet with the chair of the department. If the problem continues to be unresolved, go to the College of Business and Technology's Dean.

Students should observe the following sequence for the resolution of problems:

   Student --- Instructor --- Chairperson --- Dean

F. The last day to drop a course in the Spring semester 2017 is **Sunday, April 2, 2017**.

G. The instructor reserves the right to alter content if necessary.

**Statement on Academic Integrity:**

**Preamble**

Western Illinois University, like all communities, functions best when its members treat one another with honesty, fairness, respect, and trust. Students have rights and responsibilities ([http://www.wiu.edu/provost/students/](http://www.wiu.edu/provost/students/)) and students should realize that deception for individual gain is an offense against the members of the entire community, and it is the student's responsibility to be informed and to abide by all University regulations and policies on Academic Integrity.

Plagiarism, cheating, and other forms of academic dishonesty constitute a serious violation of University conduct regulations. Students who engage in dishonesty in any form shall be charged with academic dishonesty.

It is a duty of faculty members to take measures to preserve and transmit the values of the academic community in the learning environment that they create for their students and in their own academic pursuits. To this end, they are expected to instill in their students a respect for integrity and a desire to behave honestly. They are also expected to take measures to discourage student academic dishonesty, to adjust grades appropriately if academic dishonesty is encountered, and, when warranted, to recommend that additional administrative sanctions be considered. Grading policies are the exclusive prerogative of the faculty; administrative sanctions are under the authority of the Director of Student Judicial Programs. This document provides policies and procedures to be followed when academic dishonesty is encountered.

**Definitions of Academic Dishonesty**

The following definitions and examples are not meant to be exhaustive. The University reserves the right to determine, in a given instance, what action constitutes a violation of academic integrity. (See [www.wiu.edu/policies/acintegrity.php](http://www.wiu.edu/policies/acintegrity.php) for complete descriptions of the following topics:

1. Plagiarism
2. Fabrication and Falsification
3. Cheating
4. Complicity in Academic Dishonesty
5. Abuse of Academic Materials
6. Multiple Submissions

Reporting Academic Dishonesty

All members of the University community share the responsibility and authority to challenge and make known acts of apparent academic dishonesty. Any student, faculty member, or staff person who has witnessed an apparent act of student academic dishonesty, or has information that reasonably leads to the conclusion that such an act has occurred or has been attempted, has an ethical responsibility for reporting said act(s). Confronting and reporting academic dishonesty can be done in a variety of ways, and people should choose the manner most appropriate for the circumstances. Acts of apparent academic dishonesty that occur in the classroom should be reported directly to the course instructor, and/or the course instructor's Department Chair, and/or the instructor's College Dean. The Council on Admission, Graduation, and Academic Standards (CAGAS) or the Graduate Council will not accept or act upon anonymous reports, but will hold in strict confidence the identity of any person reporting a suspected instance of academic dishonesty, unless that person consents to having his/her identity revealed.

Access & Disabilities:

Students with disabilities: In accordance with University values and disability law, students with disabilities may request academic accommodations where there are aspects of a course that result in barriers to inclusion or accurate assessment of achievement. To file an official request for disability-related accommodations, please contact the Disability Resource Center at 309-298-2512, disability@wiu.edu or in 143 Memorial Hall. Please notify the instructor as soon as possible to ensure that this course is accessible to you in a timely manner.

Title IX Statement:

University values, Title IX, and other federal and state laws prohibit sex discrimination, including sexual assault/misconduct, dating/domestic violence, and stalking. If you, or someone you know, has been the victim of any of these offenses, we encourage you to report this to the Title IX Coordinator at 309-298-1977 or anonymously online at: http://www.wiu.edu/equal_opportunity_and_access/request_form/index.php. If you disclose an incident to a faculty member, the faculty member must notify the Title IX Coordinator. The complete Title IX policy is available at: http://www.wiu.edu/vpas/policies/titleIX.php.

Web address for student rights and responsibilities:

http://www.wiu.edu/provost/students.php

Web address for Academic Integrity Policy:

http://www.wiu.edu/policies/acintegrity.php

REFERENCES:

OSHA.gov
NIOSH.org

There are also safety links to Safety sites in a variety of states, i.e., Oklahoma

ATMAE Journal
Professional Safety
Occupational Safety and Health
EPA.gov


