OSHA Regulations-Construction Industry (OSHT 1305)

Credit: 3 semester credit hours (2 hour lecture, 1 hour lab)

Prerequisite: Passed the writing portion of COMPASS or other accepted testing instrument, CNBT 2342.

Course Description
A study of Occupational Safety and Health Administration (OSHA) regulations pertinent to the construction industry.

Required Textbook and Materials

1. OSHA Standards for the Construction Industry, (29 CFR Part 1926), January 2011 (or most current that the bookstore sells)
   CCH / Wolters Kluwer Law and Business
   a. ISBN number is 978-0808025016

2. 11/2 – 2" 3-ring binder, with pockets
   Notebook paper for binder
   *Organization of notebook; contents should include:
   - Cover page with first and last name
   - Title of course
   - Day and time of weekly class meeting
   - Semester (example, "Fall 2011")
   - Dividers labeled, syllabus, PPT. lectures, study questions, handouts, exams

Course Objectives
Upon completion of the course the student will be able to:

1. Identify the OSHA regulations which apply to the construction industry. (SCANS: C5,C7, C8, C9, F1)
2. Exhibit proficiency in retrieving specific information from Title 29 CFR Part 1926 regulations. (SCANS: C7, C8, F1, F5)

SCANS Skills and Competencies
Beginning in the late 1980's, the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in *What Work Requires in Schools.* In its research, the Commission determined that "workplace know-how" consists of two elements: foundation skills and workplace competencies. The three-part foundation skills and five-part workplace competencies are further defined in the SCANS attachment.

Course Outline

A. Welcome to LIT:
   1. Introduction of faculty and students
   2. Expectations
   3. Policies
   4. Assignment 1

B. Resources
   1. OSHA Website
   2. NIOSH, ANSI, NSC
   3. Federal Register
   4. Professional Organizations

C. General Interpretations
   1. Terminology
   2. Top Ten Construction Safety Concerns
   3. Explanation of the General Duty Clause
   4. OSHA Field Operations Manual, Chapter 4, Violations, Section III
   5. Case Study-Explosion at BP Texas City Refinery

D. General Safety and Health Provisions
   1. Employer Responsibilities
   2. Safety Training and Education
   3. Compliance Duties

E. OSHA's Focus Four Hazards
   1. Part 1-PFAS, Fall Hazard Recognition
   2. Review PFAS Checklist & Ladder Safety Exercises
   3. Guardrail & Safety Net Summary
   4. Quiz

F. OSHA's Focus Four Hazards
   1. Part 2-Caught in or Between Hazard Recognition
   2. Key Terms
   3. Review Fatal Facts Accident Summaries
   4. Review Exercise Worksheet
   5. Quiz

G. OSHA's Focus Four Hazards
   1. Struck-By Hazard Recognition
   2. Key Terms
   3. Hand Tools
   4. Power Tools
   5. Nail Guns
   6. Options A & B Focus Four Toolbox Talks Handouts
   7. Review Fatal Facts Accident Summaries
   8. Quiz

H. OSHA's Focus Four Hazards
   1. Part 3-Electrocution Hazard Recognition
   2. Key Terms
   3. General Rules for Construction Electrical Safety

4. GFCI
5. Activity A & B Scenarios
6. Fatal Facts Accident Summaries
7. Quiz

G. Scaffolds
1. General Requirements
2. Specific Types of Scaffolds
3. Aerial Lifts
4. Training Requirements
5. Fatal Facts Examples
6. Study Questions

H. Duty to Have Fall Protection
1. Fall Protection Systems Criteria and Practices
2. Training Requirements/Demonstration
3. Guardrail Systems
4. Study Questions

I. Confined Space
1. Key Terms & Examples
2. Permit Required/Non-Permit Required
3. Confined Space Pre-Entry Checklist
4. Lockout – Tagout
5. Hazards of Nitrogen Asphyxiation
5. Quiz

J. Welding & Cutting Safety
1. Subpart J-1926.350-354
2. Key Terms
3. Applicable Standards
4. Toxic and Hazardous Substances
5. Case Study

K. Excavations
1. Subpart P - 1926.650 >
2. Specific Excavation Requirements
3. Key Terms
4. Soil Classification
5. Sloping, Benching and Shoring for Trenches
6. Quiz

L. Cranes, Derricks & Subpart CC
1. Subpart N- 1926.550 Worksheet
2. Crane Safety
3. Training Requirements/OSHA Fact Sheet
4. New Points in the Revised Standard

M. Subpart Z – Toxic and Hazardous Substances
1. Asbestos (1926.1101)
2. Worksheet
3. Key Terms
4. Exposure Assessments and Monitoring
5. Compliance
6. Medical Surveillance and Recordkeeping
7. Lead in Construction
8. Employer Responsibilities
9. Compliance Program
10. Respiratory Protection
11. Hygiene Facilities and Practices
12. Medical Surveillance

Grading Scale

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = Less than 60
*Notebooks will be graded the evening of the final.

Course Evaluation

Final grades will be calculated according to the following criteria:

Test 1 = 25%
Test 2 = 25%
Notebook = 10%
Final = 40%

Course Requirements

1. Students are required to participate in labs. You cannot make up a lab assignment or activity.

Course Policies

1. No food, drinks, or use of tobacco products in class.

2. Beepers, telephones, headphones, and any other electronic devices must be turned off while in class.

3. Do not bring children to class.
4. No late assignments will be accepted.

5. Tests, Students that miss a test are not allowed to make up the test. Students that miss a test will receive a grade of '0'.

6. Attendance Policy. This policy will be covered on the first class day.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination status that provides comprehensive civil rights for persons with disabilities. Among other things, these statues require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator, at (409) 880-1737 or visit her office located in the Cecil Beeson Building, room 116B.

Course Schedule

Week 1	Construction Safety and Health Regulations
Week 2	PPE & Noise
Week 3	Signs, Signals and Barricades
Week 4	Tools-Powered Hand tools
Week 5	Exam 1
Week 6	Welding and Cutting
Week 7	Ladders and Scaffolding
Week 8	Fall Protection
Week 9	Motor Vehicles, Mechanized Equipment and Marine Operations
Week 10	Exam II
Week 11	Confined Space
Week 12	Lead Standard/Asbestos Standard
Week 13	Cranes, Derricks, Hoists, Elevators, and Conveyors
Week 14	Trenching and Excavation
Week 15	Final

*The order in which topics are covered is subject to change. Tests dates are also subject to change.

Contact Information:

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Telephone:	(409)880-8850
Office Hours:	MTWR 12:00 – 4:00

If you need to contact me, I prefer email (Email: joy.griffin@lit.edu.) because I am frequently away from my desk. If you must call and I am away from my office, please leave a voice message. I will contact you as soon as my schedule allows.