

CNET 4900 – Special Problems: Occupational Safety and Liability (3 Credits)

Fall 2019 Syllabus

INSTRUCTOR Aloysius (Al) Attah, Ph.D., P.E.		EVALUATION	
OFFICE:	Room F115G	Assignments	25%
PHONE:	(940) -565-2022	Application Project	25%
E-MAIL	alloysius.attah@unt.edu	Midterm Exam	25%
<u>Office Hours</u> By Appointment		Final Exam	<u>25%</u>
		Total	<u>100%</u>

COURSE OBJECTIVES:

At the conclusion of this course, the student should be able to:

- Describe the social, ethical, and economic impact of construction safety
- Discuss standards for safety on construction projects as promulgated by OSHA.
- Specify measures to improve safety and meet standards on a construction project.
- Apply basic technical concepts to the solution of construction problems involving construction safety.
- Develop a safety plan with specific safety measures for a typical construction project.

STUDENT OUTCOMES SUPPORTED

- #7. Applying appropriate principles of construction management, law, and ethics. (ABET #2: An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.)
- #13. Knowledge of the impact of engineering technology solutions in a societal and global context. (ABET #2: An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.)

COURSE POLICY/GRADING:

Assignments:

- There will be assignments as shown in the course outline.
- Each assignment is due in one week.
- Any late assignment will receive a grade of zero.
- All assignments shall be typed and legible and shall contain all work required to reach the solution.

Application Project

- There will be application project as shown in the course outline.
- Application project report MUST follow the “**Technical Writing Guidelines**” provided to the student.

Exams:

- There will be a midterm exam as shown in the course outline.
- A final exam will be given during the final exam period.
- Exams will be cumulative and will cover all topics shown in the course outline.

Extra Credit:

- There is none.

Other Policies:

- This course will adhere to UNT academic policies, including those for academic integrity (<http://vpaa.unt.edu/academic-integrity.htm>) and overall conduct (<http://deanofstudents.unt.edu/conduct>). It is your responsibility as a UNT student to be familiar with these policies, but feel free to ask the instructor any questions pertaining to these.
- Any accommodations for differing abilities will be made for this course as per the policies and determination of the Office of Disability Accommodation: <http://disability.unt.edu/>

COURSE MATERIALS:

- *Construction Safety and Health (2nd Edition)* by David L. Goetsch (Prentice Hall, 2013, ISBN 978-0132374699) – available at the bookstore, online, etc.
- *Supplemental Materials:* Students are strongly encouraged to access the “OSHA Standards for the Construction Industry, 29 CFR Part 1926” from the website: <http://www.osha.gov/>. Students should learn to search this vast website for additional information on construction safety problems.
- Selected articles on construction safety and health.

COURSE OUTLINE: Subject to Change

WEEK	TOPIC	ASSIGNMENTS / PROJECT	MATERIAL
1	Costs of Accidents: Why Safety is Important.	Assgn. No.1	Ch. 1
	Roles of Construction Personnel in Safety & Health.		Ch. 2
2	Accident Causation Theories.	Assgn. No. 2	Ch. 3
	Ethics and Safety.		Ch. 4
3	Workers' Compensation.	Assgn. No. 3	Ch. 5
	OSHA Compliance.		Ch. 6
4	OSHA Subparts A through E and Related Safety Practices	Assgn. No. 4	Ch. 7
5	OSHA Subparts F through J and Related Safety Practices.	Assgn. No. 5	Ch. 8
6	OSHA Subparts K through O and Related Safety Practices.	Assgn. No. 6	Ch. 9
7	Mid Term Exam		
8	OSHA Subparts P through U and Related Safety Practices	Assgn. No. 7	Ch. 10
9	OSHA Subparts V through Z and Related Safety Practices	Assgn. No. 8	Ch. 11
10	Construction Safety and Health: Program and Policies:	Begin Application Project	Ch. 12
11	Hazard Analysis & Construction Equip. Safety:	Application Project Continues	Ch. 13
12	Accident Investigation, Reporting, and Record Keeping:	Application Project Continues	Ch. 14
13	Emergency Response Plan:	Application Project Continues	Ch. 15
	Total Safety Management:	Application Project Continues	Ch. 16
14	Preventing Violence in the Workplace	Application Project Continues	Ch. 17
15	Promoting Safety	Application Project Due	Ch. 21
16	Final Exam		