

CE 4354 – Mechanical and Electrical Construction
Class Location/Time: Check Goldmine for location

Instructor: Austin Marshall Office: A214
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Phone: 747.5765
Office Hours: Monday, Tuesday: 3-5 pm.

Text: Mechanical and Electrical Systems in Buildings, by Tao and Janis, Prentice-Hall, ISBN -13:978-0-13-801562-6.

LEARNING OBJECTIVES

This course provides an understanding of mechanical and electrical systems in building construction. Students will perform simple calculation of cooling/heating demands and will understand installation methods, codes, and standards.

CLASS STRUCTURE

The course will be conducted in a hybrid structure, half online through Piazza.com and half in the classroom. Classroom sessions will begin the first week and then each other week thereafter. In class sessions, including Week 1, students will present results of the assigned text chapter problem homework. During each non-class week, students will submit homework assignments for the assigned chapters, two weeks of assigned problems, and will submit a list of problems students believe can go wrong during construction work involving the subject matter of the assigned chapters for the preceding two week period.

The Professor will not lecture on all of the reading material but will cover key points involved. Exams will consist of short written answers and some real life situation analysis of construction problems, class discussions, and the reading material. Books are allowed

to be used during exams, but notes and electronic equipment of any kind is not allowed during exams (no cell phones).

ETHICS

Cheating or plagiarism will not be tolerated. Any incidence of cheating or plagiarism will be provided to the administration for resolution.

EMERGENCIES/DISABILITIES

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

ASSISTANCE

Students should always feel free to contact the professor for assistance. Students can make appointments, walk in during office hours, email, text message, or call by phone to get assistance. Please do not hesitate to ask for help.

SUMMARY

This course will involve extensive reading and problem solving. Construction is a very serious business involving large dollar problems and often problems with people personalities on construction sites. The class will also be very serious, but if you prepare for class, it should be fun.

GRADING

Assignments(20%); Class Problem Solving(30%); Final Exam(50%)

COURSE SCHEDULE

<u>Week</u>	<u>Subject/Chapter Questions</u>
1	Overview/Chapter 1
2	Codes, standards/Ch. 2
3	HVAC Systems/Ch. 3
4	Cooling Systems/Ch. 4
5	Heating Systems/Ch. 5
6	Air Handling Systems/Ch. 6
7	Plumbing Systems/Ch. 7, 8
8	Fire Protection Systems /Ch. 9
9	Electrical Systems/Ch. 10, 11
10	Communications Systems/Ch. 12
11	Lighting Systems/Ch. 14, 15
12	Noise, vibration control/Ch. 18
13	Sustainable Construction/Ch.19
14	Final Exam