

Syllabus
CE 2326 – Engineering Economy
Spring 2024

Professor Raed Aldouri

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Civil Engineering A219

Class Time: MW 3:00 – 4:20 PM

Office hours: MW 2:00 – 3:00 PM

Course Description

This course covers the basics of economic analysis from an engineering perspective. Because cost is such an important component in decision-making, various techniques for comparing alternatives on an economic basis. Other topics include depreciation, inflation considerations, cost estimating, and sensitivity analysis. After completing the course, the student should be able to conduct an accurate economic analysis of various engineering alternatives.

Textbook Information

Required Text: Basics of Engineering Economy, 3rd ED with Connect

Authors: L.T. Blank and A.J. Tarquin

Connect Code must be purchased with the book.

If you have problems registering, call M-H tech support at 1-800-331-5094

Class and Test Schedule

The exams will typically cover three chapters as shown in the class schedule. No make up for missed exams. If you miss three assignments, you will be *dropped* for non-participation. You can repeat the homework many times to get full grades but must be submitted on time. Final Exam is optional and will replace any low exam grade.

Method of Evaluation

Three Exam 60% each is worth 20%

Homework and quizzes 40%

Table 1 – Grade Determination

<u>Final Average, %</u>	<u>Course Grade</u>
≥ 90 -----	A
80-89 -----	B
70-79 -----	C
60-69 -----	D
<60 -----	F

Tentative Materials for - CE 2326

Chapters

1. **Foundations of Engineering Economy 1**
2. **Factors: How Time and Interest Affect Money 43**
3. **Nominal and Effective Interest Rates 79**
4. **Present Worth Analysis 108**
5. **Annual Worth Analysis 137**
6. **Rate of Return Analysis 154**
7. **Benefit/Cost Analysis and Public Sector Projects 196**
8. **Breakeven, Payback, Sensitivity, and Risk Analysis 222**
9. **Replacement and Retention Decisions 276**
10. **Effects of Inflation 302**
11. **Cost Estimation and Allocation 327**
12. **Depreciation Methods 358**

Center for Accommodations and Support Services (CASS)

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.

Tentative Schedule

Exam I: covers chapters 1, 2 & 3, and I'll solve problems, then will have the exam.
Exam II: covers chapters 4, 5 & 6, and I'll solve problems and schedule the exam.
Exam III: covers chapters 7, 8 & 9, then I'll solve problems and schedule the exam.
Final Exam is optional and if you decide to take it will replace one of the lowest exam grade.

Homework Assignments on Connect

It is very important to do the homework assignments as it constitutes 40% of your grades in addition to learning process. You can repeat the homework until you achieve the highest grade but must be submitted by the due date to count.

Attendance

Attending class is part of enhancing your knowledge and understanding and the pathway to your success. Therefore, attendance is mandatory, and you will receive **a warning if you miss three lectures**, and you will be dropped from the course if you **miss five lectures**.