



JORDAN UNIVERSITY OF SCIENCE & TECHNOLOGY
MECHANICAL ENGINEERING DEPARTMENT
ME 304 Engineering Economics and Management
_____ Semester

Catalog Data - 2013:

3 Credit hours (3 h lectures): Concepts of time value of money, interest formulas, judging attractiveness of proposed investments using different methods, depreciation, inflation, increment cost and sunk cost. Introduction to engineering management.

Text Book(s):

W. G. Sullivan, E. M. Wicks, and C. Patrick Koelling, "Engineering Economy", 14th edition, Prentice Hall, 2009.

References:

L. T. Blank and A. Tarquin, "Engineering Economy", 5th edition, McGraw-Hill, 2002.

Instructor:

Class Schedule:

Office Hours:

Pre/Co-Requisites:

Non

Objectives:

- Develop cash flow diagrams for investments and evaluate their worth, and analyze the effect of inflation on an investment [a,k]
- Determine the economic feasibility of engineering projects and investments [a,k]
- Apply principles of accounting and evaluate the depreciation charges using different methods [a,k]
- Demonstrate knowledge of the concepts and principles of project management, and use project management and communications software [a,k]

Topics Covered:

Week	Topics	Chapter in Text	Exceptions
1	Introduction	Chapter 1	
2-5	Time Value of Money (Interest Formulas)	Chapter 4	Section: 4.11 Section: 4.12
	First Exam		-
6,7	Evaluating a single project	Chapter 5	-
8,9	Comparison and Selection among alternatives	Chapter 6	Section 6.6 to section 6.8
	Second Exam		-
10, 11	Cost Concepts	Chapter 2	
12, 13	Depreciation and Income Taxes	Chapter 7	Section 7.11
14-15	Replacement analysis	Chapter 9	Section 9.7 to section 9.10

Evaluation:

Homework , Quizzes and Attendance	10%
1st Exam	25%
2nd Exam	25%
Final Exam	40%

Relationship of the Course to ME Outcomes:			
ABET a – k	√	Level (L, M, H)	Mechanical Eng. Program Outcomes
a	√	H	a. Apply knowledge of mathematics, science, and engineering in practice.
b			b. Design and conduct experiments as well as analyze and interpret data.
c			c. Design a system, components, or process to meet desired needs.
d			d. Function on multidisciplinary teams.
e			e. Identify, formulate, and solve engineering problems.
f			f. Understanding of professional and ethical responsibility of an engineer.
g			g. Communicate effectively.
h			h. Broad education to understand the impact of engineering solutions in global and societal context.
i			i. Recognition of the need for, and possess the ability to engage in, lifelong learning.
j			j. Possess knowledge of contemporary issues.
k	√	M	k. Use the techniques, skills, and modern engineering tools necessary for engineering practice.
l			l. Adhere to safety rules and regulations.

L: Low, M:Medium, H: High

ABET Category:

Engineering Science	3	Credits
Engineering Design	0	Credits

Prepared By: _____

Date: _____

Rules and notes:

Never come late to the classroom, you will disturb your mates and your instructor if you get in the classroom late.

- 1) Turn OFF your cell phones during the class.
- 2) DO Not TALK during the class please, unless you have a question for me.
- 3) The exams specified on the course syllabus are not subject to negotiations or change once approved by you TODAY.

- 4) Make up exams are not held without an official signed and approved excuse from the DEAN.
- 5) Office hours are the hours I dedicate for you to ask me. If you think they do not suit you, then we can still arrange for a time of our convenience by sending an e-mail to me (you should expect an approval from my side).