

	JORDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY INDUSTRIAL ENGINEERING DEPARTMENT	
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Course Number and Name	IE 341 Engineering Economy
Course Description	This course introduces the concepts of time value of money, interest formulas, judging attractiveness of proposed investments using different methods, depreciation, inflation, increment cost and sunk cost.
Credits and contact hours	2 Credit hours; 2 hours of lectures
Pre- or Co-requisites	None
Required/ Elective	Required

Text Book(s)	W. G. Sullivan, E. M. Wicks, and C. Patrick Koelling, "Engineering Economy", 14 th edition, Prentice Hall, 2009.
Software tools	
References	<ol style="list-style-type: none"> 1. G. J. Thuessen and W. J. Fabrycky, Hamdy (2001). <i>Engineering Economy, 9th edition</i>. Prentice Hall International edition. 2. E. L. Grant, W. G. Ireson, and R. S. Leavenworth, "Principles of Engineering, Economy" 8th Edition, Wiley, 1990. 3. L. T. Blank and A. Tarquin, "Engineering Economy", 5th edition, McGraw-Hill, 2002.

Course Objectives	<ul style="list-style-type: none"> • Develop cash flow diagrams for investments and evaluate their worth • Analyze the effect of inflation on an investment • Determine the economic feasibility of engineering projects and investments • Apply principles of accounting and evaluate the depreciation charges using different methods • Apply break-even analysis to make decisions in production operations
Measured Outcomes	3a

Evaluation		
Assessment Tool	Expected Due Date	Weight
First Exam	Sun, March 30, 2014	25 %
Second Exam	Tue, May 6, 2014	25 %
Quizzes		10 %
Final Exam	According to the University final examination schedule	40%

Topics Covered		
Topics	Chapter in Text	Exceptions
Introduction	Chapter 1	
Cost Concepts and Economic Environment	Chapter 2	
Time Value of Money (Interest Formulas)	Chapter 4	Section: 4.11 Section: 4.12
First Exam		-
Evaluating a single project	Chapter 5	-
Comparison and Selection among alternatives	Chapter 6	Section 6.6 to section 6.8
Second Exam		-
Depreciation and Income Taxes	Chapter 7	Section 7.11
Replacement analysis	Chapter 11	