

KING SAUD UNIVERSITY
College of Engineering

GE 401: Engineering Economy (First Semester 1428-1429H, 2007-2008G)

INSTRUCTORS: Dr. Al-Refeai , Dr. Helmy, Dr. Zahw, Dr. Ramadan

TEXT: White, Case, Pratt and Agee, "Principles of Engineering Economic Analysis," 4th Edition.

Chapter	Topics	Homework
8	Cost Concepts: Life Cycle, Past / Sunk, Opportunity, Direct / Indirect / Overhead, Fixed / Variable (Break-Even), and Average / Marginal Costs. Sections: 8.1 and 8.2	2, 6, 7, 10, 12
2&3	Time-Value of Money and Equivalence: Compounding and Discounting Formulas, Cash Flow Diagrams and Equivalence, Annuity and Gradient Series, Nominal / Effective and Changing Rates of Return, and Inflation. Sections: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.7.1, 2.8, 2.9, 3.1, 3.2, 3.3	4,7,10,13,15,17, 20,24,26,30,39,44, 46,54,57,62,70,80, 7, 8, 10
4	Measure of Worth: Cost of Capital and MARR, PW, FW, EUAW, IRR, ERR, SIR; Capitalized Worth, and Capital Recovery. Sections: All Sections	1,3,8,10,13,15,22, 27
5	Comparison of Alternatives: Mutual Exclusiveness, Planning Horizons, Total Cash Flow Approach, and Incremental Approach. Sections: 5, 5.1, 5.2, 5.3, 5.4, 5.6, 5.8, 5.9, 5.10	1,3,5,11,21,23,24
5	Replacement And Capacity Expansion Analysis: Insider's and Outsider's View. Sections: 5.11	35, 72, 73, 87, 96, 103, 104
6	Depreciation. Sections: 6.1, 6.5, 6.10.1, 6.7, 6.11	9, 30, 31
7	Economic Analysis of Public Projects. Sections: All Sections	4, 6, 12, 14, 24

GRADE:

Quizzes and Attendance **20%** of final grade

Midterm Exam Monday 21 – 12 – 1428 H **30%** of final grade
31 – 12 – 2007 G

Final Exam **50%** of final grade