

KING SAUD UNIVERSITY

College of Engineering

GE 403: Engineering Economy (Second Semester 1434-1435H, 2013-2014G)

INSTRUCTORS: Prof. A. Al-Suhaibani, Prof. T. Al-Refeai, Prof. M. Zahw,

Dr. W. Alsaigh and Dr. H. Helmy

TEXT: White, Case, and Pratt, "Principles of Engineering Economic Analysis," 5th Edition.

Chapter	Topics	Homework
1	Introduction to Engineering Economic Analysis: Principles of Engineering Economic Analysis, Economic Analysis Techniques. Sections 1-2→1-4	8, 9, 10
2	<i>Time Value Of Money</i> : Cash Flow Diagrams, Simple Interest Calculations, Compound Interest Calculations, Multiple Compounding Periods in a year and Continuous Compound Interest Calculations. Sections: 2-1→2-6, 2-A.	6, 8, 9, 13, 15, 16, 24, 32, 56, 90, 98, 130, 156, 164, 172.
3	<i>Equivalence and Indifference</i> . Section 3-7, 3-9	40, 41, 42, 43, 44, 45, 58, 60
4	<i>Comparison of Alternatives</i> ., Choosing Planning Horizons, Sections: 4-1, 4-2	4, 5, 6
5	Measure of Worth: <i>Present Worth Analysis</i> : Single Alternative, Multiple Alternatives, One shot investment, Sections: 5-3, 5-4, 5-5 <i>Payback Period</i> : Single Alternative, Multiple Alternatives, Section: 5-6 <i>Capitalized Worth</i> : Single Alternative, Multiple Alternatives, Sections: 5-8, 5-9	CH5: 9, 10, 12, 13, 25, 27, 61, 62, 65, 66, 72, 74
6	<i>Fut ur Worth Analysis</i> : Single Alternative, Multiple Alternatives, One shot investment, Sections: 6-2, 6-3, 6-5	CH6: 4, 7, 9, 18, 31, 32, 36, 67, 68
7	<i>Annual Worth Analysis</i> : Single Alternative, Multiple Alternatives, Least Common Multiple of Lives Assumption, Sections: 7-2, 7-3, 7-4 <i>Capital Recovery Cost</i> : Section 7-6	CH7: 4, 5, 8, 23, 24, 25, 28, 51, 53, 60, 61, 63
8	<i>Internal Rate of Return</i> : Single Alternative, Multiple Alternatives, Sections: 8-2, 8-3 <i>External Rate of Return</i> : Single Alternative, Multiple Alternatives, Sections: 8-4, 8-5 <i>Analizing Alternatives With no Positive Cash Flow</i> : Section 8-6	CH8: 3, 5, 8, 15, 34, 51, 53, 54, 65, 68, 70
9	<i>Depreciation</i> .Sections: 9.1, 9.3, 9.4, 9.5, 9.A	9,10,11,12,13,14
11	<i>Replacement Analysis</i> : Sections 11-1, 11-2, 11-2-1, 11-3, 11-3-1	4, 5, 7
14	<i>Economic Analysis of Public Projects</i> .Sections: 14-1 to 14-8	6, 8, 9, 13, 15
16	<i>Cost Terminology</i> : Life Cycle Viewpoint, Past/Future Viewpoint, Manufacturing Cost Structure Viewpoint , Fixed/Variable Viewpoint and Average/Marginal Viewpoint.Section 16-2	3, 4, 6, 10, 12

Grade Distribution

Quizzes

1st Midterm (6:30-8:00 PM)

2nd Midterm (7.00-8:30 PM)

Final Exam

Tuesday 17/05/1435 (18/03/2014)

Tuesday 07/07/1435 (06/05/2014)

10% of final grade

25% of final grade

25% of final grade

40% of final grade