

SIE 265 – Spring 2023
Engineering Management I
Tentative Course Schedule

Week	Class	Day	Date	Topic	Textbook
1	1	W	1/11	Course management and Introduction	
	2	F	1/13	Introduction to Engineering Economy	Ch. 1
2	No Class	M	1/16	Martin Luther King Jr Holiday	
	3	W	1/18	Economic Analysis and the Engineering Design + Help Your Friend Case Study	Ch. 1
	4	F	1/20	History of money and interest, simple interest, P/F introduction; Compound Interest; The Concept of Equivalence; Cash-Flow Diagrams; P/F Relationship	Ch. 4.1-4.6
3	5	M	1/23	P/A & F/A Relationship; summary of discrete compounding	4.7-4.8
	6	W	1/25	Examples on 4.7-4.8; Deferred Annuities (Uniform Series)	4.7-4.9
	7	F	1/27	Examples on 4.9; Equivalence Involving Multiple Interest Formulas	4.9-4.10
4	8	M	1/30	Uniform (Arithmetic) Gradient of Cash Flows; Geometric Sequences of Cash Flows	4.11-4.12
	9	W	2/1	Nominal and Effective Interest Rates; Compounding More Often than Once per Year	4.14-4.15
	10	F	2/3	Nominal and Effective Interest Rates; Compounding More Often than Once per Year; HW 2 - Q 11 & 12	4.13 & 4.17
5	11	M	2/6	MARR, Present Worth method, Future Worth Method	5.1-5.4
	12	W	2/8	Capitalized Worth Example and Annual Worth Methods	5.3 and 5.5
	13	F	2/10	Internal rate of return (IRR)	5.6
6	14	M	2/13	IRR for Installment Financing and The Payback Period Method	5.6.1 & 5.8
	15	W	2/15	Exam Review Questions 1-4 & 5-13 in the office hours	Notes
	Exam Session	F	2/17	Exam I (HW 1 - HW 4)	
7	16	M	2/20	Chapter 6 Introduction; The Study Period & Equal Useful Lives Alternatives - Equivalent Worth Methods	6.1-6.4.1
	17	W	2/22	Equal Useful Lives Alternatives - Equivalent Worth Methods using Excel	6.4.1
	18	F	2/24	Equal Useful Lives Alternatives - Rate of Return Methods; Unequal Useful Lives Alternatives & Personal Finances	6.4.2, 6.5-6.6
8	19	M	2/27	Unequal Useful Lives Alternatives	6.5
	20	W	3/1	Ch. 6.5 Imputed Market Value; Personal Finances Examples (Self-Study); Chapter 7 Intro; Depreciation Concepts and Terminology; Classical (Historical) Depreciation Methods: SL & Db; Modified Accelerated Cost Recovery System	6.5-6.6 & 7.1-7.3
	21	F	3/3	Classical (Historical) Depreciation Methods: the rest; Modified Accelerated Cost Recovery System (MACRS)	7.3-7.5
Spring Recess - No Classes on March 3-12, 2023					
10	22	M	3/13	Introduction to Income Taxes; Effective (Marginal) Corporate Income Tax Rate; Gain (Loss) on the Disposal of an Asset; After-Tax Economic Analyses; Using spreadsheets for ATCFs analysis (video recording)	7.6-7.10
	23	W	3/15	More examples on After-Tax Economic Analyses	7.10
	24	F	3/17	More examples on After-Tax Economic Analyses	7.10
11	25	M	3/20	More examples on After-Tax Economic Analyses	7.10
	26	W	3/22	Exam Review, Announcements, and Mid-Course Survey	Notes
	Exam Session	F	3/24	Exam II (HW 4 - HW 6)	

12	27	M	3/27	Ch. 8: Intro & Terminology and Basic Concepts	8.1-8.2
	28	W	3/29	Fixed and Responsive Annuities and Spreadsheet Application	8.3 & 8.5
	29	F	3/31	Ch. 9: Replacement Analysis Intro; Reasons and Considerations for Replacement Analysis; Determining the Economic Life of a New Asset (Challenger)	9.1-9.5
13	30	M	4/3	Ch. 9: Determining the Economic Life of a Defender & Ch. 11: Intro to Breakeven Analysis and Sensitivity Analysis	9.6 & 11.1
	31	W	4/5	Breakeven Analysis and Sensitivity Analysis	11.2-11.3
	32	F	4/7	Sensitivity Analysis & Intro to Course Project	11.3 & Notes
14	33	M	4/10	Building financial statements & Project 1 Introduction	Notes
	34	W	4/12	In-Class teams work on project 1	Notes
	35	F	4/14	Balance sheet & Project 2	Notes
15	36	M	4/17	Inventory rules & Project 3	Notes
	37	W	4/19	Loans and Debt Amortization & Project 4	Notes
	38	F	4/21	Accrual Accounting & Project 6	Notes
16	39	M	4/24	Buying, Depreciating, & Selling Assets and Project 7	Notes
	40	W	4/26	Exam III Review Session	Notes
	Exam Session	F	4/28	Exam III	
17	41	M	5/1	Valuation & Project 8	Notes
	42	W	5/3	Outsourcing & Project 9	Notes