

The Citadel
Department of Civil and Environmental Engineering
CIVL 314 – Engineering Economy

Summer 2015

Text: Blank, L. T. and Tarquin, A. J., *Engineering Economy*, Seventh Edition, McGraw-Hill, New York, 2012.

Course Outline

| Lesson | Date | Topic | Reference |
|---------------|-------------|--|--------------------------------------|
| 1 | May 12 | Introduction; Terminology; Time value of money; Interest calculations; Cash flow equivalents; Simple and compound interest; Cash flow diagrams | Preface, Introduction Chap 1 |
| 2 | May 14 | Compound interest; Formulas and tables; Interest calculations | Chap 2 |
| 3 | May 19 | Combining factors | Chap 3 |
| 4 | May 21 | Quiz 1 Nominal and effective interest rates Review | Chap 4 Chap 1-4 |
| 5 | May 26 | Test 1 Present worth and capitalized cost | Chap 1-4 Chap 5 |
| 6 | May 28 | Present worth and capitalized cost Annual worth analysis | Chap 5 Chap 6 |
| 7 | June 2 | Annual worth analysis Rate of return for a single project; Multiple rate of return values | Chap 6 Chap 7 |
| 8 | June 4 | Rate of return for multiple alternatives | Chap 8 |
| 9 | June 9 | Quiz 2 Benefit/Cost ratio Continuous compounding Review | Chap 9 Chap 4 Chap 1-8 |
| 10 | June 11 | Test 2 The engineer's code of ethics | Chap 1-8 Notes; Chap 1; Chap 9 |
| 11 | June 16 | Depreciation | Chap 16 |
| 12 | Jun 18 | Breakeven analysis | Chap 13 Chap 1-9; 13; 16-17 |
| 13 | Jun 23 | Course Review | |
| | Jun 25 | Final Examination | Chap 1-9; 13; 16-17 |