| **ENGR 3325 (Section 02) Engineering Economic AnalysisCourse Schedule Summer 2023 Professor: Dr. Gregory L. Wiles** |
| --- |
| **Module** | **Class Day** |  **Lecture Type** | **Topic** | **Chapter**  | **Homework, Quizzes, and Exam Due Dates** |
|  |  |  | **Unit 1:** **Foundations of EE****How Time and Interest affect Money** |  |  |
| 1 | June 1 | Live | **Course Intro, Syllabus, Schedule** **Introduction to Chapter 1, Equivalence, Interest rates.** | *Read . . .***Chapter 1** | **Start Homework #1****See Week 3 with HW1 instructions** |
| 2 | June 1 | Live | **Review Chapters 1 and 2****Cash flow diagrams, doubling your money, spreadsheet****Algebraic derivations, factor notation.****Work problems in class, Q&A** | *Read . . .***Chapter 1****Chapter 2** |  |
| 3 | June 8 | Live | **Review Chapter 3****Shifted series, single amounts,** **Spreadsheet (NO GRADIENTS).****Work problems in class, Q&A** | *Read . . .***Chapter 3** | **Homework #1 due today****Submit online by date given in Assignments****Study for Exam 1** |
| 4 | June 8-9 | **Online** | **Exam 1 (Chapters 1, 2, 3)** **Exam will become visible after class and tomorrow.** |  | **Exam 1 date as given under Quizzes** |
|  |  |  | **Unit 2:** **Nominal and Effective Interest****Present Worth Analysis** |  |  |
| 5 | June 15 | Live | **Review Chapter 4****Nominal vs. effective interest rates, payment period, compounding period****PP>CP, PP=CP, continuous compounding.****Work problems in class, Q&A** | *Read . . .***Chapter 4** | **Start Homework #2** **See Week 6 with HW2 instructions** |
| 6 | June 22 | Live | **Review Chapter 5** **PW analysis, mutually exclusive alternatives, independent projects****FW analysis, Capitalized Cost, PW of bonds.****Work problems in class, Q&A** | *Read . . .***Chapter 5** | **Homework #2 due today****Study for Exam 2** |
| 7 | June 22-23 | **Online** | **Exam 2 (Chapters 4, 5)** **Exam will become visible after class and tomorrow.** |  | **Exam 2 date as given under Quizzes**  |

|  |  |  | **Unit 3:** **Annual Worth Analysis****Rate of Return Analysis****Incremental Rate of Return** |  |  |
| --- | --- | --- | --- | --- | --- |
| 8 | June 29 | Live | **Review Chapter 6****AW analysis, capital recovery, evaluating alternatives with AW, perpetual or permanent investments.****Work problems in class, Q&A** | *Read . . .***Chapter 6** | **Start Homework #3****See Week 10 with HW3 instructions** |
| 9 | June 29 | Live | **Review Chapter 7** **Rate of Return (ROR), ROR with PW, Cautions with ROR, ROR of bonds.****Work problems in class, Q&A** | *Read . . .***Chapter 7** |  |
| 10 | July 6 | Live | **Review Chapter 8****ROR, incremental analysis,** **ROR incremental analysis of revenue/cost, and cost only projects.****Work problems in class, Q&A** | *Read . . .***Chapter 8** | **Homework #3 due today****Submit online by date given in Assignments****Study for Exam 3** |
| 11 | July 6-7 | **Online** | **Exam 3 (Chapters 6, 7, 8)****Exam will become visible after class and tomorrow.** |  | **Exam 3 date as given under Quizzes** |

|  |  |  | **Unit 4:** **Benefit/Cost Analysis****Replacement and Retention Study****Breakeven and Payback Analysis****Effects of Inflation** |  |  |
| --- | --- | --- | --- | --- | --- |
| 12 | July 13 | Live | **Review Chapter 9****Public sector, Benefit/Cost analysis.****Work problems in class, Q&A** | *Read . . .***Chapter 9** | **Start Homework #4****See Week 15 with HW4 instructions** |
| 13 | July 13 | Live | **Review Chapter 11** **Economic service life,****Replacement study, study periods.****Work problems in class, Q&A** | *Read . . .***Chapter 11** |  |
| 14 | July 13 | Live | **Review Chapter 13****Breakeven analysis for a single project****Breakeven analysis two alternatives****Payback analysis.****Work problems in class, Q&A** | *Read . . .***Chapter 13** |  |
| 15 | July 20 | Live | **Review Chapter 14, 16\*****Impact of inflation and depreciation.****Course Summary****Work problems in class, Q&A** | *Read . . .***Chapter 14****Chapter 16** | **Homework #4 due today****Submit online by date given in Assignments****Study for Exam 4** |
| 16 | July 20-21 | **No lecture****Online Exam** | **No Final \_No lecture****Exam will become visible after class and tomorrow.** |  | **Exam 4 date as given under Quizzes** |
| 17 | July 21 |  | **Final Grade Due- Turn in all HW and take all Exams** |  |  |
|  |  |  |  |  |  |

**(Topics & assignments and due dates may change at the discretion of the instructor to accommodate course.)**