| **ENGR 3325 (Section 02) Engineering Economic Analysis Course Schedule Summer 2023 Professor: Dr. Gregory L. Wiles** | | | | | |
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| **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** |  |  |
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| 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** |  |  |
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| 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** |  |  |
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**(Topics & assignments and due dates may change at the discretion of the instructor to accommodate course.)**