

EGR 1010 SCHEDULE - WSU
Fall, 2023

LECTURE:

| DATE(S) | SUBJECT |
|---------------------------------|---|
| Week 1: 8/28-9/1 | Application of Algebra in Engineering - Linear Equations |
| | Application of Algebra in Engineering - Quadratic Equations |
| Week 2: 9/4-9/8 | Trigonometry - One-Link Planar Robot |
| MONDAY, 9/4 | NO SCHOOL – LABOR DAY |
| Week 3: 9/11-9/15 | 2-D Vectors in Engineering |
| | 2-D Vectors - Applications of Statics |
| Week 4: 9/18-9/22 | Complex Numbers in Engineering |
| FRIDAY, 9/22 | <i>Last Day to Drop without a Grade of “W”</i> |
| Week 5: 9/25-9/29 | Sinusoids and Harmonic Signals in Engineering |
| Week 6: 10/2-10/6 | Systems of Equations and Matrices in Engineering |
| FRIDAY, 10/6 | EXAM #1, 10:00 – 1:00 pm (2 hours) |
| Week 7: 10/9-10/13 | Introduction to Derivatives in Engineering |
| | Applications of Derivatives in Dynamics |
| Week 8: 10/16-10/20 | Applications of Derivatives in Electric Circuits |
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| Week 9: 10/23-10/27 | Applications of Derivatives in Mechanics of Materials |
| | Further Applications of Derivatives in Engineering |
| FRIDAY, 10/27 | <i>Last Day to Drop with a Grade “W”</i> |
| Week 10: 10/30-11/3 | Introduction to Integrals in Engineering |
| | Applications of Integrals in Statics |
| Week 11: 11/6-11/10 | Applications of Integrals in Dynamics |
| WEDNESDAY, 11/8 | EXAM #2, 10:00 – 1:00 pm (2 hours) |
| FRIDAY, 11/10 | NO SCHOOL – VETERAN’S DAY |
| Week 12: 11/13-11/17 | Applications of Integrals in Electric Circuits |
| | Further Examples of Integrals in Engineering |
| Week 13: 11/20-11/24 | Introduction to Differential Equations – The Leaking Bucket |
| WED-FRI 11/22-11/24 | NO SCHOOL – THANKSGIVING BREAK |
| Week 14: 11/27-12/1 | Applications of Differential Equations - Mechanical Systems |
| | Applications of Differential Equations – Mechanical Systems Cont. |
| Week 15: 12/4-12/8 | Applications of Differential Equations – Electrical Systems |
| | Applications of Differential Equations – Electrical Systems Cont. |
| Finals Week: 12/11-12/15 | |
| FRIDAY, 12/15 | FINAL EXAM, 10:15 – 12:15 pm |
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LAB:

| DATES | SUBJECT |
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| Week 1 | Introduction and Meet the Lab TA's |
| Week 2 | Lab #1: Application of Algebra in Engineering: The One-Loop Circuit |
| Week 3 | Lab #2: Trigonometric Relationships in One and Two-Link Planar Robots |
| Week 4 | Matlab Supplemental Instruction #1 |
| Week 5 | MAKE UP LAB WEEK |
| Week 6 (E1) | Lab #3: Measurement and Analysis of Harmonic Signals |
| Week 7 | Lab #4: Systems of Equations in Engineering: The Two-Loop Circuit |
| Week 8 | Matlab Supplemental Instruction #2 |
| Week 9 | Lab #5: Derivatives in Engineering: Velocity and Acceleration in Free-Fall |
| Week 10 | Matlab Supplemental Instruction #3 |
| Week 11 (E2) | Lab #6: Integrals in Engineering: Work and Stored Energy in a Spring |
| Week 12 | Matlab Supplemental Instruction #4 |
| Week 13 | NO LAB – THANKSGIVING BREAK (MAKE UP Mon/Tues) |
| Week 14 | Lab #7: Differential Equations in Engineering: The Leaking Bucket |
| Week 15 | Lab #8: Differential Equations in Engineering: Spring-Mass Vibration |
| Finals Week | MAKE UP LAB WEEK |