

EASTERN NAZARENE COLLEGE
PY 312 Applied Mechanics

Spring 2007

Class Schedule

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| Sept. 5 | Wednesday | Handout on Maple and using Maple to solve DEQ |
| 7 | Friday | More on Maple and DEQ |
| 10 | Monday | One Dimensional Motion Chapter 2, Sections 1, 2, 3,4 |
| 12 | Wednesday | Motion: Forces as a Function of Position and Velocity Chapter 2, Sections 5, 6 Could use one more class on Chap. 2 |
| 14 | Friday | Introduction to Harmonic Oscillator Chapter 3, Sections 1, 2 |
| 17 | Monday | Introduction to Differential Equations Handout on Solving Differential Equations |
| 19 | Wednesday | Damped Harmonic Oscillator Chapter 3, Sections 3, 4 |
| 21 | Friday | Driven Damped Harmonic Oscillator Chapter 3, Section 5 |
| 24 | Monday | Pendulum Chapter 3, Sections 6, 7, 8 |
| 26 | Wednesday | Introduction to Vectors Chapter 4, Sections 1, 2, 3 |
| 28 | Friday | Vector Calculus Chapter 4, Sections 5, 6 |
| Oct. 1 | Monday | Coordinate Systems Handout on Coordinate Systems Chapter 4, Sections 4 |
| 3 | Wednesday | Introduction to Motion in Three Dimensions Chapter 5, Sections 1, 2 |

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| 5 | Friday | Potential Energy Chapter 5, Sections 3, 4 |
| 8 | Monday | - Columbus Day -no class |
| 10 | Wednesday | no class |
| 12 | Friday | - Exam #1 – covering Chapters 1, 2, 3, 4 |
| 15 | Monday | Motion in and Electric and Magnetic Field Chapter 5, Sections |
| 17 | Wednesday | Plane Polar and Cylindrical Coordinates Chapter 6, Sections 1, 2, 3 |
| 19 | Friday | Spherical Coordinates Chapter 6, Sections 4 |
| 22 | Monday | Moving Coordinate System Chapter 6, Sections 5 |
| 24 | Wednesday | Rotating Coordinate System Chapter 6, Sections 6 |
| 26 | Friday | Motion on Earth Chapter 6, Section 7 |
| 29 | Monday | Introduction to Central Force Chapter 7, Sections 1, 2, 3 |
| 31 | Wednesday | Equations of Motion: Central Force and Inverse Square Chapter 7, Sections 3, 4 |
| Nov. 2 | Friday | Effective Potential Energy for Inverse Square Law Chapter 7, Sections 5, 6 |
| 5 | Monday | Introduction to Statics Chapter 11, Sections 1, 2 |
| 7 | Wednesday | Statics: Trusses Chapter 11, Section 3, 4 |
| 12 | Monday | Introduction to System of Particles Chapter 8, Sections 1, 2 |
| 14 | Wednesday | Exam #2 – Covering Chapters 5, 6, 7, 11 |

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| 16 | Friday | Momentum and Variable Mass Chapter 8, Sections 3, 4 |
| 19 | Monday | Collisions Chapter 8, Sections 5, 6 |
| 21 | Thanksgiving | |
| 26 | Monday | Introduction to Rigid Bodies Chapter 9, Sections 1, 2 |
| 28 | Wednesday | Rotation about an Axis Chapter 9, Sections 3 |
| 30 | Friday | Moment of Inertia Tensor Chapter 9, Sections 4, 5 |
| Dec 3 | Monday | Kinetic Energy Chapter 9, Section 6, 7 |
| 5 | Wednesday | Euler's Equations Chapter 9, Section 8 |
| 7 | Friday | Examples Chapter 9 |
| 10 | Monday | Fun and Games |