Fall 2004 MWF 9:30 Dr. J. Bechhoefer Office: P8462

PHYSICS 211-3 Intermediate Mechanics

TEXTBOOK: "Introductory Classical Mechanics"

Author: David Morin

(Available for purchase from the Physics Dept)

COURSE DESCRIPTION:

An intermediate mechanics course covering kinematics, dynamics, energy, momentum, free, forced and damped oscillations, rigid body motion, gravitation.

Prerequisite: PHYS 121; or PHYS 101 & 102 with a grade of B or better.

Corequisite: MATH 251 must precede or be taken concurrently.

Students may not count both PHYS 211 and MATH 263 for credit.

COURSE OUTLINE:

- 1. Review of statics
- 2. Review of Dynamics
- 3. Oscillations
- 4. Conservation of Energy and Momentum
- 5. Lagrangian Methods
- 6. Control Forces
- 7. Angular Momentum
- 8. Accelerated Frames of Reference
- 9. Introduction to Waves

GRADING:

Assignments	25%
Midterm	25%
Final Exam	50%