

Spring 2005
MW 16:00—17:20
Instructor: Neil Alberding
Surrey Campus

PHYSICS 120-3

Mechanics & Modern Physics

TEXTBOOK “Physics for scientists and engineers” by R. D. Knight,
Publisher: Pearson

COURSE DESCRIPTION:

A general calculus-based introduction to mechanics. Topics include translational and rotational motion, momentum, energy, gravitation, and selected topics in modern physics.

Prerequisite: BC High School Physics 12 or PHYS 100.

Corequisite: MATH 151 or 154 must precede or be taken concurrently.

Students with credit for PHYS 101 or PHYS 125 may not take PHYS 120 for further credit.

COURSE OUTLINE:

Motion in one, two and three dimensions. Newton's laws and applications, work, energy, momentum, collisions, circular motion, gravitation. Rotational motion, torque, angular momentum, rigid bodies in equilibrium, simple harmonic motion, nuclei and particles, quantum phenomena, cosmology.

GRADING:

TBA