PHYS 120: Physics I **Fall 2015** Professor: Dr. Steeves Office: Elliott 116 Office Hours: Wednesdays & Thursdays 9:30-11:00 AM or by appointment <u>http://www.phys.uvic.ca/gsteeves/</u>

### Abstract

Particle dynamics and curvilinear motion; force and momentum; rotation and static equilibrium; kinetic and potential energy; special relativity.

**Text:** University Physics, 14th edition, Young and Freedman (used editions are ok, but you still need a new/unused mastering physics code to complete the assignments)

### Assignments:

You need access to the <u>www.masteringphysics.com</u> website to complete the weekly assignments.

The course-ID you need to access the assignments is: MPSTEEVES75207

**Labs:** All lab sections are held in the Elliott 136. Labs start next week on Monday September 14.

### Marking Scheme

•	Α	В	
–Assignments	10%	10%	
–Labs	20%	20%	Labs must be passed to pass course
–Midterm exams	25%	15%	2x50 min exams
–Final exam	45%	55%	<mark>3 hour exam</mark>

We will use the scheme (A or B) that gives you the highest mark

**Calculators:** On all examinations the only acceptable calculator is the Sharp EL-510RNB which can be purchased from the bookstore.

## <u>Topics</u>

Introduction

Vectors	1.7-1.10
Motion Along a Straight Line	2.1-2.6
Motion in Two and Three Dimensions	3.1-3.5
Newton's Laws of Motion	4.1-4.6
Applying Newton's Laws	5.1-5.4

## MIDTERM 1 - OCT 9, 2015

Work and Kinetic Energy	6.1-6.4
Potential Energy and Conservation	7.1-7.5
Momentum, Impulse and Collisions	8.1-8.6
Relativity	37.1-37.9

# MIDTERM 2 - NOV 17, 2015

Rotation of Rigid Bodies	9.1-9.6
Torque and Static Equilibrium	10.1, 11.1-11.3

TRIUMF TOUR (optional) - TBD

FINAL EXAM - TBD