

# Grande Prairie Regional College

## Department of Science

### PC1240 INTRODUCTORY GENERAL PHYSICS I 3.0 (3-0-3) UT(3)

Lectures	M W	10:00 - 11:20 p.m.
	J226	
Laboratory	W or R	2:30 - 5:20 p.m. J103

---

**INSTRUCTOR:** Dr. Robert Hunt, P. Eng.

**OFFICE:** C414

**PHONE:** 539-2008/532-1338 (GPRC/HOME)

**E-MAIL:** hunt@gprc.ab.ca

**TEXT:** Physics: James Walker, 3rd Edition (Pearson)

#### COURSE CONTENT:

Algebra-based course for students in life, environmental, and medical sciences. It guides the student through two distinct types of motion: motion of matter (particles) and wave motion. Vectors, forces, bodies in equilibrium, elasticity and fracture; review of kinematics and basic dynamics; conservation of momentum and energy; circular motion; vibrations; waves in matter; wave optics; sound; black body radiation, photons, de Broglie waves; models of the atom. Examples relevant in environmental, life and medical sciences will be emphasized.

**PRE-REQUISITE:** Physics 20 or equivalent, Pure Mathematics 30. Physics 30 is strongly recommended.

Credit may normally be obtained for only one of PC1010, PC1020, PC1080, PC1240, PC1440, or PC1310.

<b>MARK DISTRIBUTION:</b>	Assignments	15%
	Laboratories	20%
	Mid-Term Examination	20% (Oct. 25/06 evening)
	Final Examination	45% (TBA)

**LABORATORY COMPONENT**

Lab #	Source Content	Week of
1	Exp. #1 Graphical Analysis	Sept. 11
2	Handout Vector Addition	Sept 18
3	Exp #3 Non-Uniform Motion	Sept. 25
4	Exp. #2 Acceleration Due to Gravity	Oct 2
5	Exp. #4 Atwood's Pulley	Oct. 9
6	Exp. #5 Potential and Kinetic Energy	Oct. 16
7	Exp. #6 Collision of Ball	Oct. 30
8	Exp. #7 Standing Waves on a String	Nov. 6
9	Exp. #8 Speed of Sound in Air	Nov. 13
10	Exp. #9 Interference of Light	Nov. 20

**GRADING GUIDELINES**

Descriptor	Grade
Excellent	A+
	A
	A-
Good	B+
	B
	B-
Satisfactory	C+
	C
	C-
Poor Minimal Pass Fail	D+
	D
	F



**(Cambridge System)**