3.01 SEP 15 2000

Grande Prairie Regional College

Department of Science & Technology

PC 1000 INTRODUCTORY GENERAL PHYSICS I 3.0 (3-0-3) UT(3)

Lectures	**T R**	**8:30 - 9:50 a.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)
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TEXT:	Physics. Cutnell & Johnson, 4th Edition
COURSE CONTENT:	Elasticity, oscillations, waves, sound, fluids, light reflection and refraction, interference and diffraction of light, dual nature of light.
PRE-REQUISITE:	Physics 30

MARK DISTRIBUTION:

Assignments	15%
Laboratories	20%
Mid-Term Examination	25% (Feb.16/00)
Final Examination	40% (TBA)

COURSE OUTLINE

Chapter 10	Stress, strain, shear, elasticity, simple harmonic motion, energy and frequency of simple harmonic oscillations.
Chapter 16	Periodic waves, sound waves, sound intensity, Doppler effect.
Chapter 17	Superposition of waves, diffraction, standing waves.

Chapter 11	Fluid pressure, buoyancy, fluid motion, viscosity.
Chapter 25	Reflection of light, plane and spherical mirrors.
Chapter 26	Refraction of light, lenses, combinations of lenses.
Chapter 27	Light interference and diffraction.
Chapter 29	Dual nature of light.

LABORATORY COMPONENT

Lab #	Source	Content	Week of
1	Exp. 4 Lab Book	Pendulum	Jan. 3
2	Exp. 2 & 3 Lab Book	Hooke's Law	Jan. 10
3	Exp. 5 Lab Book	Standing Waves on a String	Jan. 17
4	Exp. 6 Lab Book	Standing Waves in Air	Jan. 24
5	Handout	Fluid Properties	Jan. 31
6	Exp. 22 Lab Book	Terminal Velocity	Feb. 7
7	Exp. 7 Lab Book	Oscilloscope	Feb. 28
8	Exp. 8 Lab Book	Geometrical Optics	Mar. 6
9	Exp. 9 Lab Book	Interference of Light	Mar. 13
10	Handout	Balmer Series	Mar. 20

GRADING GUIDELINES

Percent (Approx.)	Grade
90 - 100	9
80 - 89	8
72 - 79	7
65 - 71	6
57 - 64	5
50 - 56	4
45 - 49	3
26 - 44	2
0 - 25	1

(Cambridge System)