

PRINCE GEORGE'S COMMUNITY COLLEGE

GENERAL PHYSICS III

PHY 204	Instructor:	Dr. D. Simpson
Section 4395	Office:	310-C Chesapeake Hall
Fall 2004	Office Hours:	Tue 5:00-6:00 pm Thu 5:00-6:00 pm
Tue 6:00- 8:20 pm CH-305	Telephone:	(301) 322-0420
Thu 6:00-10:20 pm CH-305	Email:	PGCCPHY@att.net
	Course Web site:	http://PGCCPHY.home.att.net/204/
	Textbook Web site:	http://www.pse6.com

Textbooks:

Physics for Scientists and Engineers, Volumes 1 and 2, 6th ed.,
R.A. Serway and J.W. Jewett. Brooks/Cole Pub., 2004.

Physics 204 Laboratory Experiments, Version 4, J. McClure, 2003.

Student Solutions Manual and Study Guide to Accompany Physics for
Scientists and Engineers, Volumes 1 and 2, 6th ed., J.R. Gordon,
R.V. McGrew, and R.A. Serway. Brooks/Cole Pub., 2004. (Optional.)

Recommended Reference:

The Feynman Lectures on Physics (3 vol.), R.P. Feynman, R.B. Leighton,
and M.L. Sands. Addison-Wesley, 1963.

Course Description:

This course is a calculus-based survey of simple harmonic motion,
mechanical and electromagnetic waves, optics, relativity, and modern
physics.

Prerequisite: General Physics II (PHY 203).

Tentative Schedule

Week	Dates	Topics	Chapters	Lab
1	Tu 8/31 Th 9/2	Oscillatory Motion	15	1
2	Tu 9/7 Th 9/9	Wave Motion and Interference	16, 18	2
3	Tu 9/14 Th 9/16	Sound Waves	17	3
4	Tu 9/21 Th 9/23	Electromagnetic Waves	34	4
5	Tu 9/28 Th 9/30	Exam #1 Nature of Light	35	5
6	Tu 10/5 Th 10/7	Optical Images	36	6
7	Tu 10/12 Th 10/14	Optical Images	36	7
8	Tu 10/19 Th 10/21	Interference of Light	37	8
9	Tu 10/26 Th 10/28	- No Class - Diffraction of Light	38	10
10	Tu 11/2 Th 11/4	Exam #2 Polarization of Light	38	11
11	Tu 11/9 Th 11/11	Relativity	39	12
12	Tu 11/16 Th 11/18	Relativity	39	13
13	Tu 11/23 Th 11/25	Exam #3 - Thanksgiving Break -		
14	Tu 11/30 Th 12/2	Quantum Physics	40, 41	14

15	Tu 12/7 Th 12/9	Particle Physics	46	-
16	Tu 12/14 Th 12/16	No class (exam week) Final Exam		

Homework:

Weekly problem assignments will be given every Tuesday during the recitation section and will be due the following Tuesday at the beginning of class. No late homework will be accepted. The lowest homework score will be dropped in computing your homework grade.

Recitation:

Each week during the recitation section you will be given a short problem to work in class. This problem will not be graded, but is meant to give you practice in problem-solving skills. We will go over the solution to the in-class problem during the latter part of the recitation section.

Laboratory:

Each week you will carry out a laboratory experiment and turn in a written report. Attendance at laboratory sessions is mandatory; you will not receive credit for laboratory sessions you did not attend. Laboratory reports will be due the following Thursday at the beginning of class, and must follow the format outlined in the laboratory manual. The lowest lab report score will be dropped in computing your laboratory grade.

Exams:

Three exams will be given during the semester and will be scheduled at least one week in advance (see schedule for tentative dates). If you must be absent from an exam, consult with your instructor BEFORE the exam is given. There will be no need to memorize formulae for an exam; all the important formulae will appear on a formula page passed out with the exam.

Final Exam:

In addition to these three exams, there will be a comprehensive final exam on December 16 from 6:00 to 8:30 pm.

Grading:

Your final grade will be based on your scores on homework, lab work, the three exams, and the final exam, as follows:

Homework	15%
Laboratory reports	15%
3 exams @ 15% each	45%
Final exam	25%

Grading will be determined by a class average. The following scores will be sufficient to earn the following grades:

A	90%
B	80%
C	70%
D	60%

Classroom Policies:

Academic honesty and integrity will be expected of you at all times -- for this course or any other. I will deal with infractions quite severely.

Photocopied assignments will not be accepted.

Disability Support Services:

Students requesting academic accommodations are required to contact the Disability Support Services Office (M-1042) or call (301) 322-0839 (voice) or (301) 322-0122 (TTY) to establish eligibility for services and accommodations. Students with documented disabilities should discuss the matter privately with their instructor at the beginning of the semester and provide a copy of their Student/Faculty Accommodation Form.

Code of Conduct:

The Prince George's Community College Code of Conduct defines the rights and responsibilities of students and establishes a system of procedures for dealing with students charged with violations of the code and other rules and regulations of the college. A student enrolling in the college assumes an obligation to conduct himself/herself in a manner compatible

with the college's function as an educational institution. Refer to the 2004-2005 Student Handbook, beginning on page 39, for a complete explanation of the code of conduct, including the Code of Academic Integrity and the procedure for dealing with disruptive student behavior.

Code of Academic Integrity:

The college is an institution of higher learning that holds academic integrity as its highest principle. In the pursuit of knowledge, the college community expects that all students, faculty, and staff will share responsibility for adhering to the values of honesty and unquestionable integrity. To support a community committed to academic achievement and scholarship, the Code of Academic Integrity advances the principle of honest representation in the work that is produced by students seeking to engage fully in the learning process. The complete text of the Code of Academic Integrity is in the 2004-2005 Student Handbook (pages 41-43) and posted on the college's website.