

PRINCE GEORGE'S COMMUNITY COLLEGE  
TECHNICAL PHYSICS FOR ENGINEERING TECHNOLOGY

PHY 157  
Section 4418  
Spring 2007  
Lec. MW 6:00- 7:15 pm CH-312  
Lab M 7:30-10:20 pm CH-305

Instructor: Dr. D. Simpson  
Office: 310-I Chesapeake Hall  
Office Hours: Mon 5:00-6:00 pm  
Wed 5:00-6:00 pm  
Telephone: (301) 322-0990 ext. 4768  
Email: DSimpson@pgcc.edu

Course Web site: <http://academic.pgcc.edu/~dsimpson/157>

Textbook:

Technical College Physics, 3rd Ed., J.D. Wilson. Saunders Pub., 1992.

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 covers concepts of energy and waves applied to sound, light, electricity, and magnetism.

Prerequisite: Trigonometry with Applications to Technology (MAT 134) completed or concurrent.

Tentative Schedule

Week	Dates	Topics	Chapter
1	M 1/29 W 1/31	Measurement; Units	1
2	M 2/5 W 2/7	Technical Mathematics	2

3	M 2/12 W 2/14	Work, Energy, and Power	8
4	M 2/19 W 2/21	- No class - Properties of Materials	12
5	M 2/26 W 2/28	Properties of Materials	12
6	M 3/5 W 3/7	Vibrations and Waves	13
7	M 3/12 W 3/14	Sound	14
8	M 3/19 W 3/21	Sound	14
9	M 3/26 W 3/28	Light and Illumination	27
10	M 4/2 W 4/4	Mirrors and Lenses	28
11	M 4/9 W 4/11	- Spring Break - - Spring Break -	
12	M 4/16 W 4/18	Vision; Optical Instruments	29
13	M 4/23 W 4/25	Quantum Physics	30
14	M 4/30 W 5/2	Nuclear Physics	31
15	M 5/7 W 5/9	Magnetism	23
16	M 5/14 W 5/16	No class (exam week) Final Exam	

Homework:

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

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 Monday at the beginning of class. The lowest lab report score will be dropped in computing your laboratory grade.

Exams:

Two exams will be given during the semester and will be scheduled at least one week in advance. 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 two exams, there will be a comprehensive final exam on May 16 from 6:00 to 8:00 pm.

Grading:

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

Homework	20%
Laboratory reports	15%
2 exams @ 20% each	40%
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.

Please turn off all cell phones during the class lectures.

Disability Support Services:

Students requesting academic accommodations are required to contact the Disability Support Services Office (M-1042) or call (301) 322-0838 (voice) or (301) 322-0122 (TTY) to establish eligibility for services and accommodations. Students with documented disabilities should discuss the matter privately with their instructors 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 2006-2007 Student Handbook, beginning on page 43, 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 2006-2007 Student Handbook (pages 44-47) and posted on the college's website.