

PRINCE GEORGE'S COMMUNITY COLLEGE

GENERAL PHYSICS I

PHY 1030	Instructor:	Dr. D. Simpson
Section 09371	Office:	310-I Chesapeake Hall
Fall 2016	Office Hours:	Tue & Thu 5:30-6:00 pm
Tue & Thu 6:00-7:50 pm CH-110	Telephone:	(301) 322-0990 ext. 4768
	Email:	dsimpson@pgcc.edu

Course Web site: <http://www.pgccphy.net/1030>

Textbook Web site: <http://www.cengage.com/physics/serway>

Textbooks:

Physics for Scientists and Engineers, Volume 1, 9th ed., R.A. Serway and J.W. Jewett. Brooks/Cole, 2013.

Study Guide with Student Solutions Manual and Study Guide to Accompany Physics for Scientists and Engineers, Volume 1, 9th ed., R.A. Serway and J.W. Jewett. Brooks/Cole, 2013. (Optional.)

Recommended Reference:

The Feynman Lectures on Physics (3 vol.), R.P. Feynman, R.B. Leighton, and M.L. Sands. Addison-Wesley, 1963. (A new "Definitive Edition" of these lectures was published in 2006.)

Course Description:

This course is a calculus-based study of classical mechanics, including laws of motion, force, energy and momentum, and gravitation.

Prerequisite: Calculus I (MAT 2410)

Co-requisite: Calculus II (MAT 2420)

Tentative Schedule

Week	Dates	Topics	Chapters
1	Tu 8/30 Th 9/1	Math Review; Measurement	App B; 1
2	Tu 9/6 Th 9/8	Kinematics (1D)	2
3	Tu 9/13 Th 9/15	Vectors	3
4	Tu 9/20 Th 9/22	Kinematics (2D)	4
5	Tu 9/27 Th 9/29	Newton's Laws	5
6	Tu 10/4 Th 10/6	Circular Motion	6
7	Tu 10/11 Th 10/13	Energy	7
8	Tu 10/18 Th 10/20	Conservation of Energy	8
9	Tu 10/25 Th 10/27	Linear Momentum	9
10	Tu 11/1 Th 11/3	- No Class - Linear Momentum	9
11	Tu 11/8 Th 11/10	Rotational Motion	10

12	Tu 11/15 Th 11/17	Angular Momentum	11
13	Tu 11/22 Th 11/24	Gravitation	13
14	Tu 11/29 Th 12/1	Celestial Mechanics - Thanksgiving Break -	-
15	Tu 12/6 Th 12/8	Advanced Topics	-
16	Tu 12/13 Th 12/15	- Final Exam	

Homework:

There will be approximately one homework assignment per week, usually given out on Tuesdays and due the following Tuesday. All homework assignments, i.e., problem sets, are due at the BEGINNING OF CLASS (6:00 pm). No late homeworks will be accepted for any reason. A 15-minute grace period is allowed for students who may be detained. Tardy papers are marked. Although late papers are graded for the benefit of the student, these late papers receive a score of zero. Homework assignments may not be sent by e-mail without prior approval of the instructor. The lowest homework score will be dropped in computing your homework grade.

The final homework will be a small project involving celestial mechanics, and will be worth two regular homeworks.

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.

Calculators or slide rules are permitted during exams. Any use of cell phones or smart watches during exams is strictly prohibited. All cell phones and smart watches must be OFF and put away during all exams.

Final Exam:

In addition to these two exams, there will be a comprehensive final exam on December 15 from 6:00 to 8:30 pm.

Grading:

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

Homework	25.0%
Exam 1	25.0%
Exam 2	25.0%
Final exam	25.0%

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.

Under unusual circumstances and at the discretion of the instructor, assignments may occasionally be submitted by e-mail. Check with your instructor before submitting any assignments by e-mail.

Photocopied assignments will not be accepted.

Disability Support Services:

Students requesting academic accommodations are required to contact the Disability Support Services Office (B-124) 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 2016-2017 Student Handbook:

http://www.pgcc.edu/student_life/student_handbook.aspx

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 2016-2017 Student Handbook and posted on the college's website.

Delayed College Openings:

When the College announces a delayed opening, all classes with at least 45 minutes of class time remaining at the time of the opening will be held. For example, in the event of a 10 a.m. opening, a 9:30-10:45 a.m. class will be held. This procedure applies to all credit classes.