

DEPARTMENT OF PHYSICS
LEHIGH UNIVERSITY

Physics 10: General Physics 1

Summer Session I - 2016

SYLLABUS (Please read carefully)

Physics 10 is the first part of General Physics (General Physics I, General Physics II is taught in Physics 13). Physics 10 is an calculus based introductory course to physics, and it is meant mainly for students oriented for example towards the biological and environmental sciences, or pre-med students. Physics 10 is a calculus based course, but it requires a little less use of calculus compared to the course taken by engineering and physics majors (Phys 11). Although you are required to be able to understand calculus, especially while reading your textbook, you will be required to be able to use integrals and derivatives only in very simple applications. Subjects covered include mechanics, energy, momentum, thermodynamics, and fluids. The purpose of this course is to introduce these topics as well as learn about some of the principles underlying physics. Starting with simple problems, we will develop strategies for solving more complex ones.

Instructor

Dr. Paola M. Cereghetti

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Office: LL 410

Office hours: I will be available at 9am before class on Monday, Tuesday, and Wednesday. To schedule an appointment at a different time, please e-mail me, thanks!

Class Meetings

Monday through Wednesday from 9:30am to 11:45am & Thursday from 9:00am to 11:45am in LL311.

NOTE: May 30 (Memorial Day) the class will not meet.

Textbook

College Physics by Openstax College downloadable for free at <https://openstaxcollege.org/textbooks/college-physics/get> We will cover about half of the book.

Using the Assignment Sheets

Each reading assignment is to be completed before the class meeting listed. Because of the intensive nature of this course, some assigned material will be briefly presented in class, and you will be expected to learn it by doing homework problems.

Class notes and reading assignments

Class notes will be handed out in class. These notes are just for your convenience and do not replace the textbook. Carrying out the reading assignments before each class will facilitate considerably your understanding of the material.

Homework

Homework will be assigned every day. HW is meant to reinforce the material learned during the day in class, and is due the following day. Usually, over the weekends, HW will be longer. Some HW problems will be covered in class before the time they are due.

The homework grade will be calculated from the points you earn in the homework assignments. Opportunities for extra credit will be given. HW may also include non-graded problems that you are strongly recommended to try to solve as part of preparing for the tests.

Homework solutions and extra practice exercises

Homework solutions will be provided in class. Please make sure that you understand each problem that you have not been able to complete correctly. Practice packets (exercises with solutions) will be provided as a help to prepare for the quizzes and final.

Work outside the classroom

This is a 4-credit class. It is standard practice that for every hour of class 3 hours are spent studying or doing homework. You can spread this time out over a few hours each day of class, on Fridays, and over the weekends.

Attendance

Since physics is an intensive subject, keeping up to date is essential. Consequently, **you are expected to attend all classes and to do all assignments on time.**

Quizzes:

There will be 5 quizzes, each one at the end of the week starting with the second week. There will be no make-up for quizzes (see grading below). Quizzes and the final exam are closed book; you can prepare a one-sided equation sheet for each quiz and an additional one for the final exam. During the final exam, you will be able to keep 6 one sided pages of equations.

Grading:

Your numerical grade in the course will be determined as follows:

Attendance	10
Homework	20
5 Quizzes	20
Final Exam	20

Total	70

- In the final exam, you will find again the material from the 5 quizzes. If your performance in the final in a particular section is better than your performance in the corresponding quiz, your grade for that quiz will be changed to the average grade of the quiz and the corresponding section in the final.

- If you miss a quiz for a valid reason, the quiz grade will be taken from the grade of the corresponding section in the final exam.

Accommodations for Students with Disabilities:

If you have a disability for which you are or may be requesting accommodations, please contact both your instructor and the Office of Academic Support Services, University Center C212 (610-758-4152) as early as possible in the semester. You must have documentation from the Academic Support Services office before accommodations can be granted.

The Principles of Our Equitable Community:

Lehigh University endorses The Principles of Our Equitable Community [http://www.lehigh.edu/~inprv/initiatives/PrinciplesEquity_Sheet_v2_032212.pdf]. We expect each member of this class to acknowledge and practice these Principles. Respect for each other and for differing viewpoints is a vital component of the learning environment inside and outside the classroom.