Physics 0175
Basic Physics for Students of Science and Engineering 2
Fall Term 2020 (2211) CRN 11248

Lecturer: Prof. Robert P. Devaty
E-Mail: devaty@pitt.edu

Office Hours: Mondays, Fridays 11am – noon
via Zoom within Canvas; Passcode 152170
(if needed)

Recitation Instructors:
Raphael Monroy
Office Hours: Mondays, 2:30 - 4:30 or by appointment
Zoom link: https://pitt.zoom.us/j/96487934423
Meeting ID: 964 8793 4423
Passcode: 89793

Resource Room: Thursdays 10 am - noon

Nicholas Suarez
Office Hours: Thursdays 10 am – noon or by appointment
Resource Room: Mondays 9 – 11 am
Thursdays 9 -10 am

Undergraduate Teaching Assistant: Christopher Guiher
E-Mail: cmg137@pitt.edu

Office Hours: Tuesdays 11 am – 1 pm
Fridays noon – 1 pm, or by appointment

Go to Canvas for up-to-date listings of office hours.

Text: Fundamentals of Physics (Extended Tenth Edition) by David Halliday, Robert Resnick and Jearl Walker, Chapters 21-33, 35 – 36. It is important to do the assigned reading before the associated lecture. (Note: The print edition of the 11th Edition is identical to the 10th Edition. The on-line version of the 11th edition, which I have not seen, is quite different. Since I am not choosing homework problems from the book, any previous edition of Halliday, Resnick and Walker, or any other calculus-based introductory physics text you like will serve the purpose. They all cover the same material, more or less in the same order.)

Lectures: The lectures are scheduled for 8:55 – 9:45 am on Mondays and Fridays and 7:50 – 9:40 am on Wednesdays in L9 Clapp Hall. The lectures will be delivered synchronously and recorded using Zoom and will be available asynchronously afterwards on Canvas. There will also be many short (about 5 minutes each) lecture videos available on Canvas. I have the collection of lecture videos made by Dr. David Nero. Once the required equipment arrives, I may make short videos of my own. You should read the assigned sections in the textbook and/or view the lecture videos before lecture. There will be concept quizzes to try to identify which aspects of the material you understand and which should be emphasized during the lectures. Long uninterrupted lectures are known to not be very effective for learning, so I would like the lectures to be focused and relatively brief episodes in the midst of student activities such as group problem solving in breakout rooms, “clicker questions”, etc. Lecture activities will count for credit to the extent that performance can be recorded with the available software. For those participating asynchronously, alternative means for earning the lecture credit will be provided. Note that there is no requirement to attend lectures in the lecture hall, even though “lecture participation” will contribute towards your course grade.

Homework: Homework will be assigned using Sapling. It is your responsibility to do the homework before your recitation section as preparation for the weekly quizzes. Understanding the
concepts and applying them to solve problems are essential for successful performance on the quizzes and exams. To access Sapling, see the instructions on Canvas.

Recitation: Your recitation section provides the opportunity to ask questions and discuss the material in a smaller group. You will also benefit from the alternative viewpoint of the recitation instructor. The intended format for the recitation is:

- Quick review of recent material (5-10 minutes)
- Questions / discussion / problem solving (25-30 minutes). It is highly desirable that most of the recitation period be used for active learning. For example, the recitation instructor can break up the group into smaller groups to do work sheets or guided problems, or ask students to work out problems on the board.
- Weekly quiz (10-15 minutes)

Your recitation grade will be based on the quizzes.

Canvas Site: There is a Canvas site associated with this course. It can be accessed through your my.pitt.edu account. This site will be used to make important announcements and to make materials available such as lecture recordings with slides, videos, quizzes, announcements, tutorials, etc. Homework will be handled using Sapling, independent of Canvas (not synced).

Examinations: There will be two preliminary examinations, given during regular lecture periods. The scheduled dates are September 23 and October 28, both Wednesdays. There will be a final exam, but the date/time has not yet been set by the University.

Grading: Your grade will be based on a total of 500 available points, distributed as follows:

- Exam 1: 90
- Exam 2: 90
- Final Exam: 100
- Homework: 60
- Recitation Quizzes: 80
- Reading Quizzes: 40
- Lecture Activities: 40

Your score out of 500 will be converted into a letter grade, which is intended to reflect the level of your mastery of the learning goals for this course.

Help: There are many resources available for help in addition to the regular office hours of the instructor and teaching assistant. These include:

- “Resource Room”: This on-line “room” is staffed by graduate student teaching assistants for the introductory physics and astronomy courses. The hours will be posted on the departmental website. Click on “Resource Room” at the link http://www.physics.pitt.edu/resource-room.
- UTA Peer Tutors
- Resources: https://www.studentaffairs.pitt.edu/drs/resources/
- If you wish to hire a private tutor, contact the Physics departmental office, 100 Allen Hall.

Academic Integrity: Students in this course will be expected to comply with the University of Pittsburgh's Policy on Academic Integrity. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of
the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam, including dictionaries and **programmable calculators**.

**Disabilities:**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services (DRS), 140 William Pitt Union, (412) 648-7890, as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course. Link: [https://www.studentaffairs.pitt.edu/drs/](https://www.studentaffairs.pitt.edu/drs/)