Syllabus for PHYS 0111
Introduction to Physics 2
Fall 2022

Course Information

CRN	10429
Location	Alumni Hall 343
Lecture	Monday, Wednesday and Friday 1:00 – 1:50pm
Text	https://openstax.org/details/books/college-physics

Instructor	Russell J. Clark, Ph.D.
email	ruc2@pitt.edu
Office	OEH 404

Office hours	Monday:	8:30am – 9:30am
	Tuesday:	2:30pm – 3:30pm
	Wednesday:	2:30pm – 3:30pm
	Thursday:	2:30pm – 3:30pm
	Friday:	7:30am – 8:30am

Other times by appointment: http://tinyurl.com/Russell-Clark-Appointments

Course Description and Objectives

This course is the second half of a two semester, algebra based introductory physics course. The first half is Physics 0110*, Introduction to Physics 1*. You should have successfully completed Physics 0110 or its equivalent with a C or better before enrolling in this course. The goal of the course is to learn physics and to develop the skills of critical thinking and problem solving. In particular, you will learn to apply the principles of

- Thermodynamics (chapters 13-15)
- Electricity (chapters 18-19)
- Electronics (chapters 19-20)
- Magnetism (chapter 21)
- Electromagnetic induction (chapter 22)
- Light and electromagnetic waves (chapter 24)
- Optics (chapters 25-27)

Attendance is mandatory in both the lectures and the recitations.

Text and Materials

The textbook for this course is *College Physics* by Urone and Hinrichs. It is free and available through this link: https://openstax.org/details/books/college-physics.

Important Dates:

Month	Date	Day	
August	29	Monday	First day of classes
September	5	Monday	Labor Day, no class or recitation
October	**3**	**Monday**	**Midterm Exam 1**
October	14	Friday	Fall Break, no class or recitation
November	**7**	**Monday**	**Midterm Exam 2**
November	21	Monday	Thanksgiving Break, no class or recitation
November	23	Wednesday	
November	25	Friday	
December	8	Friday	Last day of classes
December	**13**	**Tuesday**	**Final Exam (4:00-5:50pm)**

Course Grades

Your grade in this course will be based on questions asked in the lecture, the homework assignments, collaborative exercises in the recitations and exams. These grades will be weighted according to the table below.

Lecture Questions	10%
Collaborative Exercises	10%
Homework	20%
Midterm Exam 1	20%
Midterm Exam 2	20%
Final Exam (cumulative)	20%

Lecture Questions: During the lectures, the instructor will give you quick problems to solve. You may collaborate with your neighbors to find the solutions. Correct answers will receive full credit (100%) and incorrect answers will receive 90% credit. Answers will be submitted and graded through *Top Hat* (see below).

Collaborative Exercises: During the recitations, your TA will give you collaborative exercises (similar to homework problems) that you will complete in small groups. These exercises will be collected from each group and graded by your TA.

Homework: Understanding how to apply concepts in Physics to solve problems is very important. Therefore, homework problems are a very important part of this course. The instructor will assign several homework problems (see *Achieve* below) after each lecture, which will be due the following week. Homework will not be assigned or due on the day of an exam. The homework assignments are not intended as collaborative work, but you are welcome to discuss problem-solving strategies with your classmates. If you need help with the homework then you are encouraged to ask about the problems in the recitations, go to the office hours for Dr. Clark or your TA, or use one of the resources listed below.

Midterm Exams: There will be two midterm exams (see the schedule above). These will be multiple-choice exams. Books and other resources will not be allowed, but you will be given a formula sheet. The exams will be graded through Gradescope (see below).

Final Exam: The final exam will be cumulative, meaning that it will have questions from all of the chapters covered during the semester. Otherwise, the conditions will be the same as the midterms; multiple-choice with an equation sheet provided by the instructor.

Getting Help

The Department of Physics and Astronomy provides free assistance for all students. The **Physics Help Room** is staffed with TAs who can answer homework related questions, explain basic concepts and help you with the math. This is a free service and you are encouraged to use it. The Physics Help Room is located in Thaw 312 (http://www.physicsandastronomy.pitt.edu/resource-room).

Peer assistance is available from undergraduate teaching assistants (UTAs) in the UTA Help Room for this course (http://www.physicsandastronomy.pitt.edu/uta-help-room-304-oeh).

In addition, peer tutoring is available through the Study Lab (https://www.asundergrad.pitt.edu/study-lab).

Online Systems

We will use four online systems for this course. Each is described below.

Canvas: (https://canvas.pitt.edu/) Canvas is the course management system for the University of Pittsburgh. There you will find all of the courses materials, such as the syllabus, lecture notes and links for the other systems listed below. Canvas will also act as the master gradebook for the course.

Achieve: (https://achieve.macmillanlearning.com or follow the link in Canvas) *Achieve* is an online homework system by Macmillan Learning. This is where you will receive and complete the homework assignments. If your PHYS 0110 instructor used *Achieve* and you purchased the two-term access option, then you will be able to use that to access *Achieve* this term. Otherwise, you will need to purchase access to *Achieve* for this course (see the link above).

Top Hat: (https://app.tophat.com or follow the link in Canvas) *Top Hat* will be used for the lecture questions. Access is free and the join code is **117463**. You will need an internet accessible device during the lecture, such as a laptop, tablet or smart phone. Please contact Dr. Clark if you do not have such a device.

Gradescope: (https://www.gradescope.com or follow the link in Canvas) *Gradescope* will be used to grade the midterm and final exams. You will only need to access *Gradescope* if you want to access the exams after they have been graded.

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.

To learn more about Academic Integrity, visit the Academic Integrity Guide for an overview of the topic. For hands- on practice, complete the Understanding and Avoiding Plagiarism tutorial.

Disability Services

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, drsrecep@pitt.edu, (412) 228-5347 for P3 ASL users, as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

Health and Safety Statement

In the midst of this pandemic, it is extremely important that you abide by public health regulations and University of Pittsburgh health standards and guidelines. These rules have been developed to protect the health and safety of all community members.

Failure to comply with these requirements will result in you not being permitted to attend class in person and could result in a Student Conduct violation. For the most up-to-date information and guidance, please visit https://www.coronavirus.pitt.edu/.

Statement on Classroom Recording

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

Email Communication

Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address.

Title IX:

Legal text: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." As a professor, I am a mandatory reporter and I am required to report violations of Title IX that I observe, or am made aware of, to the Title IX office. Title IX violations include, but are not limited to, sexual harassment, sexual violence and verbal or sexual abuse. Within the classroom, behavior in violation might appear as suggestive jokes or innuendos, inappropriate touching, and unwanted sexual behavior or advances, but my capacity and obligation to report does not end at the classroom.