

PHY 1200

Physics of Everyday Life – Winter 2020

Syllabus

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Office hours: T/TH 3:00-4:47PM

Textbooks:

There is no textbook required for this course. We will use the notes that you can download from <https://sites.google.com/a/oakland.edu/phy1200/>

Recommended Texts:

- Paul G. Hewitt, *Conceptual Physics*. The bookstore ordered the 11th edition but you can also use previous ones. Also I will distribute notes and send them by Moodle.
- D. Macauley *The Way Things Work* (occasional reference)
- L. Bloomfield *How Things Work* (occasional reference)
- L. Kirkpatrick & G. Wheeler *Physics A World View* (occasional reference)

Course Prerequisites and goals:

The essential prerequisite is *curiosity* and a desire to learn.

The goal is to learn some science, and find that doing so can be both enjoyable and useful.

Classroom Etiquette

- Get to class on time
- Turn mobile phones off
- No food in the lab or classroom please

Course Structure:

In Physics 1200, *The Physics of Everyday Life*, we will have some emphasis on learning by experiment combined with listening to lectures. The intended audience is students interested in natural phenomena in the world around us and in the working of the fruits of technology. Although no prior training in

physical science is assumed, I will try to achieve a qualitative and, insofar as possible, a quantitative understanding of the systems we study. We will achieve this, I hope, by direct experiment, and by learning some basic principles--not by mathematical analysis.

Since we will do some experiments, which are performed in class, *attendance is mandatory*, and will be recorded. The primary record of a student's work will be the Laboratory Notebook, which includes notes, diagrams, graphs, results, and interpretation.

Required Work

- Attend ALL classes. Arrive promptly and stay the entire period.
- Perform all laboratory work.
- Complete all homework and return in the indicated date.
- Keep a (3-ring) Laboratory Notebook with brief reports of each lab
- Take all tests.
- Explore, be attentive and interactive, pose questions to each other and figure things out.

Grading

25% Laboratory Notebook. This notebook will be due a week before the end of class.

15% Homework and Quizzes.

30% Tests. There will be two midterms and a final exam.

30% Attendance.

Up to 2 absences per term (with cause) will be permitted.

Each additional missed class will decrease the overall grade by 3%.

Grading will NOT be on a curve.

The final grade will be computed according to the table below

Letter Grade	Percent scale
A	90-100
A-	88-90
B+	80-87
B	73-79
B-	69-72
C+	64-68
C	60-63
C-	57-59
D+	53-56
D	50-52
F	<50