

PHY 131 – FALL 2015

NOTE: Information in this syllabus should be considered as “preliminary”.
All students are responsible for changes announced in lecture and via class Email.

Course Organization

The course is comprised of two main divisions: Lecture and Recitation. Lectures are meetings of the entire “in-person” class. Recitations are meetings with faculty in groups of ~35 students or less. Both portions are required and make contributions toward the final class grade. There is additionally an online version of the class. Online students receive lecture and recitation via recordings of the live class(es). Laboratory is an entirely separate class.

Lecture

Lectures are held in Javitz 100. Attendance is required and enforced by “clicking in”. Online students receive a special “punctuated echo” recording that replaces the “clicker” questions with browser-based responses.

Recitation

Because the class has so many students, it is difficult for students to receive individual attention during the main lecture. For this reason, the course is additionally divided into 16 so-called recitation sections numbered R01-R16. Recitation sections are typically focused upon helping students to understand and complete that week’s homework assignment. Recitations are taught by faculty members. During a recitation meeting, it is possible that a quiz, additional homework, or some other instrument used to determine the student's recitation grade will be assigned and/or collected.

Required Material

1. Textbook: Physics for Scientists and Engineers: Foundations and Connections - 1st Edition.
2. All Course Information handed out in lecture.
3. A **NON-Programmable** calculator.
 - a. Exams allow no formula sheets.
 - b. Calculator should have:
 - c. Addition, subtraction, multiplication, division.
 - d. Trig functions.
 - e. Log functions.
 - f. Square root.
 - g. Calculator must not have ability to store **formulas**.
 - h. Practice with your exam calculator even on homework.
4. An account in the WebAssign system (see below).
5. A clicker from the Turning Point Company

Grade Determination

The grades will be calculated based upon the following percentages:

| | | | | | | |
|------------|--------|--------|--------|-----|----------|------------|
| | Exam-1 | Exam-2 | Exam-F | Rec | Homework | Attendance |
| Percentage | 15 | 15 | 30 | 10 | 15 | 15 |

Your final score based upon the weightings listed above will be compared to the following scale to determine the letter grades (*i.e.* there is not a curve in PHY131):

| | | | | | | | | | | | |
|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|
| | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | F |
| Percentage | 90- 100 | 85- 89 | 80- 84 | 75- 79 | 70- 75 | 65- 69 | 60- 64 | 55- 59 | 50- 54 | 45- 49 | below 45 |

The grades will be *normalized* between recitation sections. Normalization is not curving since the grades will be brought to the same mean as one another without an overall shift upward or downward.

Homework

The homework is electronic and available here: <http://www.webassign.com/> Details on signing into webassign will be given in the first lecture.

Getting Help

Office Hours

PHY131 and PHY132 are indeed difficult courses and most students require help from time to time. The best source of help is to go to the office hours of anyone in the course staff. Everyone in the course (Lecturers, Recitation Instructors, and Lab Instructors) hold regular office hours. You can and should go to these office hours when you need help.

Help Room

All course members will sit shifts in room A-129. A-129 is the room where you hand in lab reports and it is also known as the Help Room.

Review Videos

Review videos are available posted on the course web page. Up to 2% extra credit is available for viewing them all. They are divided into headings by "learning objective" and are not a perfect match to the book (they are better).

Review Sessions

Professor Hemmick has developed a tradition of holding **extensive** review sessions outside of class. These are typically held in the evenings or weekend before an exam. Typically one 8-hour review is held prior to each midterm and prior to the final. During these reviews, we do physics problems from practice exams (mostly the same material as the review videos) and we make them up on the spot and

upon request from any source. The idea is that by the time the review is finished, everyone present should be so thoroughly familiar with the material that the exam will have become easy.

The philosophy is simple. The exams in this course are tough but fair. We will work as hard as necessary so that by the time you take them they will seem easy. High scores on a tough exam is the explicitly stated goal of the instructor and should be the same goal for all students. Scheduling of these reviews will be done in lecture.

Exams

Large classes hold evening exams scheduled by the university, NOT the instructor. Here are links to the schedule of these so-called "common exams":

<http://www.stonybrook.edu/registrar/Fall%202015%20Calendars/FALL%202015%20EVENING%20EXAMS.pdf>

<http://www.stonybrook.edu/registrar/Fall%202015%20Calendars/1158%20Fall%202015%20final%20exams%20REV%207-22-15.pdf>

Schedule of Lecture

The Class Calendar (accessed through Blackboard) will show a rough outline of which topics will be covered at what time. The actual schedule may vary somewhat.