

Syllabus for Physics 2021, Fall 2014

Instructor: Prof. Michael Paolone
Office: BA 405A (door on left), Barton Hall or SERC 470 (when it opens)
Phone / email: 215-204-5080 / michael.paolone@temple.edu
Office Hours: M & T 12:00pm-2:00pm

1 Course Description

This is an introductory course to General Physics with Calculus. We will discuss a range of topics from Classical Motion and Newtons Laws to Wave and Fluid Mechanics. I will focus on providing a strong fundamental physics base of knowledge with emphasis on developing problem solving skills. Biology topics in physics will be tied in where appropriate. A good working knowledge of basic calculus and trigonometry is essential to performing well in this class.

2 Book and Required Materials

Book: Principles of Physics, 5th edition, by Serway and Jewett
Additional material: Enhanced WebAssign, NON-programmable calculator

You can purchase the textbook bundle that comes with *Enhanced WebAssign* from the bookstore. If you choose to use a different book, or not purchase the bundle, you will need to purchase separately the Homework and eBook. You can purchase the book, WebAssign, or Bundle directly from the publisher at www.cengagebrain.com and enter the name of the book or an ISBN number below.

Full Book + WebAssign Bundle:

- ISBN-10:1133422012, or ISBN-13:9781133422013

Enhanced WebAssign for Physics (book not included, you **do not** need this if you purchase the bundle above):

- ISBN-10:1285-858409, or ISBN-13:9781285858401

WebAssign homework assignments can be found at <http://www.webassign.net>. When first logging in, you will need to enter a course key:

- **course key: temple 3332 1913**

if you have any problems with WebAssign, you can contact the student support at: http://www.webassign.net/user_support/student

3 Laboratory and Recitation Sections

Recitation Instructor: Prof. Andreas Metz
Office: SERC 424 (or BA 224, Barton Hall), Temple University Main Campus
Phone/Email: 215-204-7668 / Metza@temple.edu

Office Hours: W F 12:00pm-2:00pm

All Laboratory sections will be held in Barton Hall (exact room TBA). Check your section number (sections range from 72-87) for the exact day and time. Laboratory attendance is **mandatory!**

4 Homework and Recitation

Homework will be 10% of the final grade. Homework will be assigned weekly on <http://www.webassign.net>. Extensions will not be given for homework assignments. At recitation, problems similar to homework will be worked out in detail. There is no credit for attending recitation, but you are greatly encouraged to attend, as some of the test questions will come from recitation problems.

5 Weekly Quiz

There will be a weekly quiz given on Friday in the last 15 minutes of class. Quizzes will typically be “easier” questions than test questions, and will count as 10% of your total grade. You will be provided with any physics equations or definitions you may need to solve quiz problems. It is highly recommended that you attempt all homework problems before you take the quiz.

6 Exams

You will be given three tests in total: Exam-1, Exam-2, and a Final Exam.

YOU ARE NOT PERMITTED TO USE ANY ELECTRONIC DEVICES, PROGRAMMABLE CALCULATORS, OR BOOKS FOR THE EXAMS OR QUIZZES.

For the exams, you are permitted to bring a single 8.5” by 11” page of notes with **ONLY HAND-WRITTEN OR HAND-DRAWN** content. This page is subject to review by your exam proctors and must be turned in with your exam answers. Bring your student ID to exams and keep it visible for the proctor to check against the roster during the exam.

Make-up exams will **ONLY** ever be given in the case of a **DOCUMENTED** emergency.

7 Grading Percentages

- Final Exam: 30%
- Exam-2: 20%
- Exam-1: 15%
- Labs: 15%
- WebAssign Homework: 10%
- Quizzes: 10%

8 Classroom Attendance Policy

Attendance is very important. There will be an occasional attendance roster given at the beginning of class (2:00pm sharp) that will count towards some of your homework grade. Please be in class and in your seat before the beginning of lecture. Tardiness will not be tolerated, as it is a distraction to others in the class.

9 Laboratories

Laboratories are a significant part of your coursework and grade. The experiments have been coordinated with your lecture topics, although some labs will be your first introduction to the material to be covered in class. Each student must write their own lab report, and the reports should contain the following information:

1. Title / date / your name (listed first and under-lined) / lab partners names.
2. Statement of the topics investigated.
3. Brief description of the experiment.
4. List of all devices used in the experiment.
5. Picture of the experimental set-up (if-possible)
6. Tables with recorded data (don't forget units!)
7. Graphs, sketches, and figures when applicable.
8. Calculations and results.
9. Answers to questions in the lab-manual.
10. Conclusions.

Essentially, a good lab-report should A) be completely repeatable to someone who does not have the lab-manual by your descriptions and instructions alone, B) Have a clear description of the data you obtained, and C) come to a conclusion based on the topic and data collected.

The lab report is due one week after the lab is completed. Late lab reports will be penalized by 10% per day late. Keep in mind that the mailboxes for the TA's in room BA 116 will not be available outside business hours (8:30am to 5pm). Labs start the second week of the semester.

10 Academic Integrity

Students are expected to work together, but must submit their own work. Dishonesty concerning submitting your own work will result in strict penalties (often a zero for the assignment), and severe or repeated offenses will result in an automatic zero for the course.

11 Disability Declaration Statement

A student with a disability should contact me as soon as possible so that appropriate accommodations can be made.

12 Schedule

Mon	Wed	Fri	Topic	Chapter
8/25	8/27	8/29 (Quiz 1)	Introduction to Vectors	1
9/1 (Labor Day / no class)	9/3	9/5 (No quiz)	Motion in 1D	2
9/8	9/10	9/12 (Quiz 2)	Motion in 2D	3
9/15	9/17	9/19 (Quiz 3)	Laws of Motion	4
9/22	9/24	9/26 (Quiz 4)	Application of Newtons Laws	5
9/29	10/1	10/3 (Exam 1)	Work and Energy	6
10/6	10/8	10/10 (Quiz 5)	Conservation of Energy	7
10/13	10/15	10/17 (Quiz 6)	Momentum and Collisions	8
10/20	10/22	10/24 (Quiz 7)	Gravity and Planetary Motion	11
10/27	10/29	10/31 (Quiz 8)	Oscillatory Motion	12
11/3	11/5	11/7 (Exam 2)	Mechanical Waves	13
11/10	11/12	11/14 (Quiz 9)	Superposition and Standing Waves	14
11/ 7	11/19	11/21 (No quiz)	Fluid Mechanics	15
11/24	11/26	11/28	Fall Break / no classes	-
12/1	12/3	12/5 (Quiz 10)	Select Topics	-
12/8 (Review Session)	-	-	-	-
12/15 (Final Exam)	-	-	-	-

13 Exam Dates and Locations

Exam-1: 10/3, 2:00pm - 2:50pm

Exam-2: 11/7, 2:00pm - 2:50pm

Final Exam: 12/15, 1:00pm - 3:00pm