

FALL SEMESTER, 2017

Syllabus for Section 4 of PHYSICS 211: Physics for Science and Engineering I

Lecture time/place: MWF, 8:00 – 8:50 a.m., Room 101 Lewis Hall

Tests and Help Sessions: Thursdays, 5:30 – 7:00 p.m., Jackson Center

Professor: Dr. Thomas Marshall

Professor's Office/phone number: Room 126 Lewis, 915-5325

Professor's E-mail address: marshall@olemiss.edu

Office Hours: MWF 07:20 – 07:50 a.m., 104 Lewis

MWF 11:15 – 11:45 a.m., 104 Lewis.

Text: *Matter and Interactions* 4th edition, by Ruth W. Chabay and Bruce A. Sherwood.

You may purchase or rent any of the following:

- Hardcopy full text (covers 2 semesters): ISBN 978-1118875865.
- Hardcopy Volume I: ISBN 978-1118914496
- Ebook+Webassign: Option to purchase the ebook when purchasing access to online homework system

Other Required Items

- *Online homework system: WebAssign.* The system can be accessed through **Blackboard** (blackboard.olemiss.edu). Students must purchase access to *WebAssign* for this class. *WebAssign* can be purchased with access to the ebook (see above).
- *Classroom response system: Top Hat.* Students must purchase access to Top Hat for use in class.
- *Vpython compiler: Glowscript.* This is an online Vpython compiler available for free at glowscript.org. Students can sign in with olemiss user id and password. Vpython will be used to model physical systems in this course.
- *Scientific calculator.* Any calculator with trigonometric functions, exponential functions and scientific notation.

Course Description: This is a three credit-hour, calculus-based physics course which covers basic mechanics. In this course, we will use a few fundamental models to describe a wide range of physical phenomena. Topics to be covered include motion, forces, momentum and energy. These topics will be presented in terms of interactions between objects.

Course Objectives: We will cover Chapters 1-12. Learning objectives are given at the beginning of each chapter in the textbook. You are responsible for accomplishing everything listed in the objectives. Quizzes, tests, and the final exam will examine whether you have achieved these objectives.

Grading Scale

- $92\% \leq A \leq 100\%$
- $88\% \leq A- < 92\%$
- $84\% \leq B+ < 88\%$
- $80\% \leq B < 84\%$
- $76\% \leq B- < 80$
- $72\% \leq C+ < 76\%$
- $68\% \leq C < 72\%$
- $64\% \leq C- < 68\%$
- $50\% \leq D < 64\%$
- $F < 50\%$

Grades will be based on homework, in-class quizzes, tests, and the final exam:

Homework	20 %
In-class quizzes	15 %
Three tests	45 % (15% each)
Final exam	20 % (Monday, Dec. 4, 2017, at 8:00 a.m.)
Total	100 %

Tentative test dates are as follows:

Test 1: 09/21, 5:30 – 7:00 p.m. at the Jackson Center

Test 2: 10/19, 5:30 – 7:00 p.m. at the Jackson Center

Test 3: 11/16, 5:30 – 7:00 p.m. at the Jackson Center

Other course events such as help sessions may also occur on Thursdays from 5:30 – 7:00 p.m. at the Jackson Center.

If you must miss an in-class quiz, a test, or the final exam because of a civil duty (e.g., jury duty or military service), official University competitions, performances, or travel, religious observations, or certain scheduled medical procedures, please inform Dr. Marshall ahead of time to arrange an accommodation. Missing a quiz, a test, or the final exam without prior notification of Dr. Marshall may lead to receiving a zero on the quiz/test/exam. However, illnesses and other problems, which sometimes occur unexpectedly, may lead to an accommodation in this policy.

Homework will be assigned almost every class day. You may work with others on homework (but not on the quizzes, tests or final exam). Two types of homework will be used: online and written. Each written and each online assignment is due at the **beginning** of the next class after the homework was assigned. Late homework assignments will receive a zero; however, each student will have their lowest 3 homework grades dropped. This policy may be adjusted for extended excused absences (e.g., due to an extended illness). The policy of dropping the lowest 3 grades will also apply to daily quizzes.

Homework is one way of practicing and applying your knowledge physics. **You won't learn much physics if you don't practice using it. Please remember that you are doing homework to help yourself.**

Homework Rules for written homework:

1. Homework is due at the **beginning** of class on the due date.
2. For homework please use white paper that is 8.5 x 11 inches with no torn or tattered edges; transgression of this rule may reduce your grade on the assignment.
3. Multiple homework pages should be stapled together. You may use the back.
4. **Show all your work**; the answer alone is not worth anything. Homework solutions must be **explained with enough English to be understandable**.
5. Homework answers should have units and a reasonable number of significant digits.

Expectations:

Class attendance is expected, since almost everything you need to know on the tests will be discussed in class. Arriving late to class or leaving early distracts everyone (me especially). If you are taken ill during class, feel free to leave.

- In order to do well in the course, students should expect to spend about 3 hours preparing for each class, with 1.5 hours for the assigned reading and 1.5 hours for the assigned homework. The reading will be preparation for the next lecture while the homework will cover concepts discussed in the previous lecture.

- When reading the assigned textbook sections, complete the “Checkpoints” and “Questions” interspersed in the text. The daily quizzes will be similar to the Checkpoints; i.e., if you really understand how to work the Checkpoints, you should be able to work the daily quiz problem(s).
- Study the textbook regularly. Do not wait until just before the homework is due or a test is imminent. Class discussion will not cover all of the assigned material, but students will have the opportunity to ask questions about any of the assigned material.
- Assigned readings and homework can be found on the course calendar on **Blackboard**.

It is University policy to provide, on a flexible and individual basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities, which have been verified through the [Office of Student Disability Services](#), need to contact me at the beginning of the semester to discuss their individual needs for accommodations.

No Audio and video recording

Audio and/or video recording of class lectures is not allowed unless explicit permission is given by the instructor. Permission will only be given if the student has a Student Disability Services request. In such cases, recordings may only be used by the student to whom permission is given and all recordings must be deleted at the end of the semester. Recordings may not be distributed online or elsewhere.

Please read the following two University policy statements concerning class attendance:

1. Students must attend the first meeting of every course for which they are registered, unless they obtain prior departmental approval. Without such approval, a student who is absent from the first class meeting may be dropped from that class by the dean of the school or college with the responsibility for the course.
2. A student who incurs excessive absences in a given course may receive a grade of F for the course, and, in addition, may be dismissed from the class upon recommendation of the instructor and approval by the student’s academic dean. When it appears to an instructor that a student has discontinued a class without officially dropping the course, the instructor will report this fact to the student’s academic dean. The university reserves the right to dismiss from the university any student who has been excessively absent from multiple courses.

The University requires that all students have their course attendance verified at least once during the first two weeks of the semester. If your attendance is not verified, then you will be dropped from the course and any financial aid will be adjusted accordingly. Please be sure to sign the attendance sheets that will be passed around during the first two weeks of the semester.