SPRING SEMESTER, 2018

SYLLABUS for Section 4 of PHYSICS 212: Physics for Science and Engineering II

Lecture time/place: MWF, 9:00 – 9:50 a.m., Room 101 Lewis Hall

Test Time: Thursdays, 5:30 – 6:50 p.m. 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 08:00 – 08:50 a.m., 104 Lewis

Text: *Matter and Interactions* 4th edition, Vol. 2, by Ruth W. Chabay and Bruce A. Sherwood. You may purchase or rent any of the following: Hardcopy full text (covers 2 semesters), Hardcopy Volume 2, or Ebook+Webassign

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.
- Non-programmable scientific calculator for tests: Any non-programmable calculator with trigonometric functions, exponential functions and scientific notation.

Course Description: This is a three credit-hour, calculus-based physics course which covers electricity, magnetism, electromagnetic waves, and related topics including geometrical and physical optics.

Course Objectives: We will cover Chapters 13-23. Learning objectives are given at the beginning of each chapter in the textbook. You are responsible for accomplishing everything listed in the objectives, except for Vpython programming, which we will omit. Homework, in-class activities, tests, and the final exam will determine whether you have achieved these objectives.

Grading Scale: A's: 90-100%, B's: 80-89.99%, C's: 70-79.99%, D's: 60-69.99%, and F's: less than 60%. The +/- grading scale will not be used.

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

Homework 15 % In-class quizzes 5 % In-class clickers 10%

Three tests 45% (15% each, on a Thursday from 5:30 - 6:50 p.m.)

Final exam 20 % (Wednesday, May 9, 2018, at 8:00 a.m.)

Total $\overline{100\%}$

If you must miss an in-class activity, a test, the final exam, or the on-time completion of a homework assignment 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. Without prior notification of Dr. Marshall, missing an in-class activity, a test, or the final exam or failing to complete a homework assignment on time may lead to receiving a zero on the activity/test/exam/homework. However, illnesses and other problems, which sometimes occur unexpectedly, may lead to an accommodation in this policy.

Before-class reading assignment: In almost every class a reading assignment from the class textbook will be given. This reading should be completed before the next class, since that material will be discussed in the next class.

In-class quizzes: In-class quizzes will occur during almost every class, will be given via TopHat, and will be based on the reading material assigned for that day. When reading the assigned sections, complete the "Checkpoints" and "Questions" interspersed in the text. Many of the daily quizzes will be similar to the Checkpoints in the reading.

In-class clickers: For many classes there will be in-class "clicker" questions to be answered via TopHat. These questions will concern physics concepts being discussed in class or concern previous physics concepts related to the in-class discussion.

In-class written: Written in-class activities will occur during almost every class. These activities are aimed at helping prepare students for the homework assignment given that day, which will be due at the beginning of the next class. For this reason, the day's written activities will be turned in at the beginning of the next class for grading.

You cannot participate in the in-class activities if you are not in class when they occur.

Homework is assigned almost every class day and is due at the beginning of the next class. You may work with others on homework (but not on the in-class quizzes, the tests, or the final exam). Homework will be done online using WebAssign. 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). Homework is one way of practicing and applying your knowledge of physics. I suggest that you write out your homework solutions and save them to study for the tests and final exam. You won't learn as much physics if you don't practice using it by doing the homework.

Although WebAssign has a means of asking questions about individual problems and for requesting homework due-date extensions, **I do not read that part of WebAssign**. If you want to ask questions or request extensions, you must email me or ask me in person. Extensions of the due date are never granted without a satisfactory reason.

Class attendance: Class attendance is expected, since essentially everything you need to know on the tests will be discussed in class. Arriving late to class or leaving early distracts everyone, so please avoid it. However, if you become ill during class, please feel free to leave.

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 Dr. Marshall. 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.