

Physics 212 Section 1

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Class time/location: MTuWThF 8:00 – 9:50 am Lewis 101
Office hours: Right after class each day and by appointment.

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Description

This is a three credit-hour, calculus-based physics course which covers electricity and magnetism, electromagnetic waves, and related topics, including geometrical and physical optics. This is the second part of a two-semester survey of classical physics.

Course Objectives

Students should be able to complete the textbook learning objectives given in each section. Homework, in class activities, quizzes and tests are intended to assess whether students have achieved these objectives.

Required Text

- [University Physics Volume 2 from OpenStax](#):
ISBN-13: 978-1-947172-21-0
ISBN-10: 1-947172-21-2

This is an open-source textbook from OpenStax at Rice University. It is available free online in a variety of formats, including html, pdf, Apple iBooks, and Amazon Kindle. If you prefer, you can purchase a print version from OpenStax via Amazon.com. If you do choose to buy from Amazon, be sure to use the link on the textbook page at openstax.org to ensure that you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high quality.)

Other Required Items

- *Online homework and classroom activity system: Webassign.* The system can be accessed through Blackboard (blackboard.olemiss.edu). Students must purchase access to Webassign for this class. If you're undecided about this course, you are welcome to hold off on paying and to take advantage of WebAssign's 14-day free trial.
- *Scientific calculator.* Any calculator with trigonometric functions, exponential functions and scientific notation.

Course Prerequisite and Corequisites

- Prerequisite: Physics 211
- Corequisites: Physics 222 and Math 262

Grading Scale

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

Evaluation

Tests (45%)

- 3 tests equally weighted. Note that tests are given weekly during the class time.
- Tests are closed book (no books, notes or "cheat-sheets"). Calculators are allowed. A sheet of formulas and constants will be provided for the tests.

Homework (20%)

- Homework sets will be assigned using the Webassign online homework system that can be accessed through Blackboard.
- There is a 25% penalty for each submission beyond 3. To avoid this penalty, students should work each problem carefully on paper before submitting solutions. This will also be very helpful when studying for tests.
- In addition to online homework, some problems will be assigned to write on paper with detailed solution, and must be turned in at the beginning of class, in class, on the due date.
- No late homework will be accepted.

Attendance (15%)

- You are required to attend all of the classes and participate the in-class questions. Attendance

grade will be deducted for unexcused class absents and/or not participating in-class activities.

Final exam (20%)

- The final exam is comprehensive. The format will be decided towards the end of the semester.

Policies

Classroom Health Requirements

Please follow the instructions on the University COVID-19 information website:
<https://coronavirus.olemiss.edu/>

Academic Integrity

Every student of the University of Mississippi, by virtue of choosing to be part of the university community agrees to abide by the University of Mississippi Creed and the [UM Academic Integrity Policy](#) which covers academic integrity. Please consult the M-Book, Academic Integrity document for details on university policy and the academic creed.

Cheating is forbidden and will result in a zero grade on the assignment. If a second case of cheating occurs, this will result in an F for the entire course.

UM Creed

The University of Mississippi is a community of learning dedicated to nurturing excellence in intellectual inquiry and personal character in an open and diverse environment. As a voluntary member of this community:

- I believe in respect for the dignity of each person
- I believe in fairness and civility
- I believe in personal and professional integrity
- I believe in academic honesty
- I believe in academic freedom
- I believe in good stewardship of our resources
- I pledge to uphold these values and encourage others to follow my example

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intellectual property law and the UM Academic Conduct Code unless expressly permitted for by the instructor. Accessing such materials for your own use is also in violation of the UM Academic Conduct Code.

University of Mississippi Access and Inclusion

The University of Mississippi is committed to the creation of inclusive learning environments for all students. If there are aspects of the instruction or design of this course that result in barriers to your full inclusion and participation, or to accurate assessment of your achievement, please contact the course instructor as soon as possible. Barriers may include, but are not necessarily limited to, timed exams and in-class assignments, difficulty with the acquisition of lecture content, inaccessible web content, and the use of non-captioned or non-transcribed video and audio files. If you are approved through SDS, you must log in to your Rebel Access portal at <https://sds.olemiss.edu> to request approved accommodations. If you are NOT approved through SDS, you must contact Student Disability Services at 662-915-7128 so the office can: 1. determine your eligibility for accommodations, 2. disseminate to your instructors a Faculty Notification Letter, 3. facilitate the removal of barriers, and 4. ensure you have equal access to the same opportunities for success that are available to all students.

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.

Important Dates

See academic calendar

[\(https://registrar.olemiss.edu/second-summer-term-2021/\)](https://registrar.olemiss.edu/second-summer-term-2021/)

Tests and Final Exam

Test dates and topics are subject to change. The final exam date is fixed and cannot be changed.

Test 1: 07/08, during class.

Test 2: 07/15, during class.

Test 3: 07/22, during class

Final Exam

Thursday July 29, 8:00 – 11:00 am