THE UNIVERSITY OF MISSISSIPPI

Conceptual Physics II

PHYS 108 – Spring 2026
Department of Physics and Astronomy

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Course Description

Catalog Description

This course is an overview of physics and the physical universe presented primarily from a conceptual rather than mathematical perspective. It uses lectures, demonstrations, and laboratory exercises to illustrate applications of physics to everyday phenomena in an integrated lecture-laboratory format. This course covers electricity and magnetism, light, atomic physics and relativity.

3 credit hours

Learning Objectives

The goals of this course are to 1) provide an interesting, enjoyable and accurate introduction to the concepts of physics and 2) hopefully instill a lasting awareness and wonder about our physical world. I believe if these two goals are met, then your ability to understand and deal with almost everything you encounter in life will be enhanced (Skeptical? Think about it and ask me!).

Physics is the most basic science – it is the foundation of all other sciences. Therefore, it should be part of the general education for both science and nonscience students. Physics is essential for understanding the world around you as well as your relationship to it. Unfortunately, the mathematics and problem-solving skills required to "do" physics often deter average nonscience students from an encounter with the subject. In this course I attempt to avoid this obstacle by presenting the ideas of physics conceptually with equations used as guides to thinking about the relationships in nature rather than as recipes for algebraic computations. We won't be trying to become proficient problem-solving physicists in this course; we will try to gain a perspective on nature from which we can think critically about the world in which we live.

Times and Places

Lectures: CSTI 122	Sections 1-4: MW 10:00-10:50 AM	Laboratory: CSTI 439	Section 1: Tuesday 1:00-2:50 PM Section 2: Tuesday 5:00-6:50 PM Section 3: Wednesday 1:00-2:50 PM Section 4: Wednesday 3:00-4:50 PM
Office Hours: Lewis Hall 203B	Monday 2:00-3:00 PM Wednesday 3:00-4:00 PM		
Final Exam:	Sections 1-4: Friday, May 8 at 8:00 AM		

Course Materials

Books

Required:
Conceptual Physics, 13th Edition, by Paul Hewitt (ISBN: 9780137394975)
Conceptual Physics I Phys 108 Laboratory Manual (free in-house digital copy)

Optional:
The Practice Book for Conceptual Physics, 13th Edition by Paul Hewitt (ISBN: 978-0135774625)

Top Hat

We will be using the Top Hat classroom response system. You will be able to submit answers to in-class questions, and take all quizzes and tests using any personal or mobile device (i.e. your phone or laptop). In addition, most class materials (assignments, lectures, notices, etc.) will be posted in Top Hat course folders. You can visit the Top Hat Overview within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An invitation should have been sent to you by email (to your go.olemiss.edu address), but if you didn't receive this email, you can register by simply visiting our Top Hat PHYS 108 course website. Note: our course "Join Code" is 893994. Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here. If you're undecided about this course, you are welcome to hold off on paying and to take advantage of the 7-day trial account option.

If at any time you require assistance with Top Hat, please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491.

Some Course Policies

> Please arrive on time for the entire lecture or else not at all.
> Read the textbook chapter which I will cover in lecture before coming to that lecture (see the **Lecture_Schedule** document posted on Top Hat).
> A **Study_Aids** document will be provided - suggested Exercises from the text and Practice Book – posted on Top Hat. These are presented to give you an idea of what I stress on the Tests. I do not collect these; however, solutions to odd-numbered exercises are available in the back of the textbook, and if you wish I shall look over your other work and discuss it with you during office hours or Review Sessions).
> Review sessions before the Tests will be held at the following times and locations (please note location may change):

Review for Test 1: Monday, Feb 9, 7:00-9:00 PM, CSTI 122
Review for Test 2: Monday, Mar 2, 7:00-9:00 PM, CSTI 122
Review for Test 3: Thursday, Apr 2, 7:00-9:00 PM, CSTI 122
Review for Test 4: Monday, Apr 27, 7:00-9:00 PM, CSTI 122

Review session before the Final Exam will be held at the following time and location:

Review for Final: Friday, May 1, 10:00-11:50 AM, CSTI 122

Course Credit and Grading

Tests

We will be using the Top Hat Test feature to allow us to go paperless and run quizzes and exams online from any personal or mobile device (i.e. your phone or laptop) in an online, secure testing environment. During a test, if you leave the full screen test mode, click on a notification, open a new tab, access any other app, or use the print screen or screenshot functions, you will be automatically locked out of the test. It is very important that you purchase your Top Hat subscription with Top Hat Test as soon as possible at the beginning of this course so that there are no complications when it is time for the first test! We will have a practice quiz the first day of class to give you a chance to do a dry-run of Top Hat Test. See this article for more information on purchasing Top Hat with Top Hat Test (https://tophat.com/pricing/).

There will be four in-class Tests given during the semester. Extra credit will be added to each Test score depending on the scores earned on the quizzes which covered the same material as the Test. The Tests are multiple-choice with 33 questions. Each Test is scored with 100 points denoting all answers are correct. With extra credit a maximum score of 115 is possible. Details on the extra credit quizzes can be found in the **Extra_Credit** page posted in Top Hat. The class test-taking rules used on test days are described in the **Test_Rules** document posted in Top Hat

There will be a comprehensive Final Exam with 50 multiple-choice questions. Students have the option of earning extra credit on the Final Exam by completing a short essay. Details on the extra credit quizzes and essay can be found in the **Extra_Credit** page posted in Top Hat.

Final Exam

There will be a comprehensive Final Exam with 50 multiple-choice questions. Students have the option of earning extra credit on the Final Exam by completing a short essay. Details on the extra credit quizzes and essay can be found in the **Extra_Credit** page posted in Top Hat. The Final Exam will be given in CSTI 122 according to the following schedule:
Sections 1-4: Friday, May 8:00 AM

You may not reschedule your final exam time.

Laboratory

A 2 hour per week laboratory experience is part of the course. Like in a game, to fully understand physics, you need to know how to keep score. This involves observing, measuring, and expressing your findings in numbers. That's what the lab manual is for, to help you do physics and understand what you are doing! The experiments are detailed investigations about some specific phenomena. They require acquiring, recording, and analyzing data. Often times they involve using special equipment or apparatus.

> You must obtain and print out your lab manual from the following link: Conceptual Physics I Phys 108 Laboratory Manual
> Attendance in lab is mandatory for both you *and your lab manual*. You will not be allowed in the door without your lab manual.
> You must read the assigned lab experiment in the lab manual before coming to lab.
> At the beginning of the lab period, a quiz will be given covering details in the lab experiment as noted in the lab manual.
> A data sheet(s) is part of every experiment. It must be filled in legibly to receive credit. It will be turned in to your TA before leaving lab. It must be your own work.
> Questions must be answered in complete sentences, using proper grammar and spelling. Attach your responses to the data sheet (or respond on the data sheet).
> You will receive a zero grade for any unexcused missed lab. If a lab is missed for a valid, officially documented reason (namely, a medical emergency or university required event), then that lab may be made up during the Lab Review session offered during the week of April 21. Note that a maximum of two labs may be made up, and they must be approved by Prof. Quinn before the lab is missed except in the case of a medical emergency, in which case the medical excuse must be presented to Prof. Quinn as soon as the

student is able to return to class.
> Three unexcused lab absences will result in an automatic F for the entire course.

Lab grade credit will be earned according to the following weights:

Quiz grades:	10% of your Report Average
Report Average:	85% of your *overall lab grade*
Lab Final Exam:	15% of your *overall lab grade*

Course Grading Scheme and Scale

The lowest score out of the four midterm Tests will be dropped. Course credit will be earned according to the following weights:

Laboratory	30%
Test 1	15%
Test 2	15%
Test 3	15%
Final Exam	25%
	100%

Grades will be assigned according to the scale in the table below:

90% ≤ A
80% ≤ B < 90%
70% ≤ C < 80%
60% ≤ D < 70%
0% ≤ F < 60%

Attendance

Lecture attendance is not strictly required, but it is ***strongly*** recommended! I do give daily quizzes in class which count as extra credit, and anything covered in lecture may appear on a test, whether or not it can be found in the text or Study Aids. Also, note the university requires that all students have a verified attendance at least once during the first two weeks of the semester for each course. If your attendance is not verified, you will be dropped from the course and any financial aid will be adjusted accordingly. Please see http://olemiss.edu/gotoclass for more information.

Academic Integrity

Students are expected to adhere to the Standards of Honesty as described in Policy Code ACA.AR.600.001 and the M Book. Students are reminded that cheating in any form will not be tolerated. Performance on all tests and assignments must represent the individual work of the student. Those who violate the Standards of Honesty will be reported to the University's Academic Discipline committee, and subject to the appropriate sanction, which may range from receiving a 0 on the assignment in question to expulsion from the University, depending on the severity of the infraction.

Intellectual Property

The faculty senate has adopted this statement concerning unauthorized distribution of course materials.

"All materials distributed electronically and in hard copy in this class are protected under intellectual copyright. Any attempt to upload these documents onto the Internet (or to distribute them by some other means) or to profit from the distribution (by Internet or other means) of these documents constitutes theft and will be in violation of 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. Additionally, the distribution of your own class notes via the Internet or other means, or access of such materials, encourages absence from class and is highly discouraged."

You do not have my permission to post online or otherwise distribute in any manner, any class materials whatsoever.

Disability 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.