Syllabus – Phys 212

Department of Physics & Astronomy

Instructor Dr. Pilgrim
Office: 211A Lewis Hall
Email: bbpilgri@olemiss.edu

Office Hours: Monday 10-12, Friday 10-12, Tuesday 1-2, Thursday 1-2 or by appointment

Catalog description

This is a three credit-hour, calculus-based physics course which covers electricity and magnetism, modern physics, and physical optics. This course deals with electric and magnetic interactions, which are central to the structure of matter, to chemical and biological phenomena, and to the design and operation of most modern technology.

3 credit hours

Course Objectives

- Be able to both mathematically and conceptually describe electro/magnetostatics and dynamics and the connection between electricity and magnetism and their connection to light and other electromagnetic waves and be able to work relevant problems.
- Comprehend the theory behind geometric optics.
- More broadly, develop critical thinking skills and the ability to use physical intuition and translate this intuition to mathematics to solve problems.

Course Corequisites

• Prerequisite: Physics 211

• Corequisite: Physics 222 and Math 262

Textbook

University Physics Volume 2 and 3, by OpenStax.

https://openstax.org/details/books/university-physics-volume-2

https://openstax.org/details/books/university-physics-volume-3

Grades

This is list just reflects the minimum required numerical grades needed to obtain a particular letter grade; this is subject to change but only in favor of widening the intervals, not shrinking them.

A [90,∞)

B [80,90)

C [70, 80)

D [60,70)

F $(-\infty, 60)$

Grade Breakdown

Participation 15%

Test 1 15%

Test 2 15%

Test 3 15%

Homework 20%

Final 20%

Attendance

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. Apart from this, I strongly suggest that you attend class as part of your grade depends on participation in class.

Academic integrity and honesty

Students are expected to adhere to the University of Mississippi Creed and 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 shall represent the individual work of the student. Those who violate the Standards of Honesty will be reported and subject to the appropriate sanction, which may include expulsion from the University.

Intellectual property

All materials distributed electronically and in hard copy in this class are protected under intellectual copyright. Any attempt to upload these documents to a file sharing service or to profit from their distribution by any means constitutes theft and will be in violation of intellectual property law and the UM Academic Conduct Code unless expressly permitted for by the instructor.

Nondiscrimination policy

The University complies with all applicable laws regarding affirmative action and equal opportunity in all its activities and programs and does not discriminate against anyone protected by law because of age, color, disability, national origin, race, religion, sex, sexual orientation, handicap, or status as a veteran or disabled veteran.

Policies and procedures for students with disabilities

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 should contact the Office of Student Disability Services (662-915-7128 or sds_equipments. to discuss their individual needs.

Student Support Services

Students are encouraged to visit the University's Keep Learning site https://keeplearning.olemiss.edu/ to access information and resources related to COVID-19 support. The site provides links to University student services to facilitate and support learning.

Students with diagnosed health concerns that may affect their compliance with COVID-19 health requirements should contact UM's Student Disability Services (SDS) Office https://sds.olemiss.edu/ to see if they are eligible for an SDS accommodation as soon as possible.

The University Counseling Center is a professional facility offered by the University of Mississippi to assist students, faculty, and staff with many types of life stressors that interrupt day-to-day functioning, including the stressors associated with the COVID-19 pandemic. They offer individual counseling, couple's counseling, group counseling, stress management, crisis intervention, assessments and referrals, outreach programs, consultations, and substance abuse services. There is no fee for currently enrolled University students and everything you say to your counselor is confidential. You can contact the Counseling Center for information about mental health issues at https://counseling.olemiss.edu, counslg@olemiss.edu, 662915-3784, 320 Lester Hall, and https://www.facebook.com/universitycounselingcenterolemiss/. You can schedule an appointment or get information about appointments by calling the UCC at 662-915-3784.

Classroom Health Requirements

Students are expected to comply with the University's protocols when they are in effect. Currently, a mask requirement is in place for vaccinated and unvaccinated people. As a result, proper mask wearing is required indoors and in the classroom. Current protocols can be found at https://coronavirus.olemiss.edu/. Students who have a diagnosed health concern that interferes with the wearing of face masks may contact the Student Disabilities Services (SDS) Office to seek a University-approved accommodation. Please contact SDS at https://sds.olemiss.edu/ for more information.

If students test positive for COVID-19 at any health care facility, they must contact the Student Health Center at 662-915-7274. (Faculty and staff should contact the Employee Health Service at 662-915-6550.) University Health Services will coordinate contact tracing to lessen the likelihood of spread.

Students with COVID-19 should seek medical attention at the Student Health Center and contact their instructor to let them know that they will be missing class due to a health-related issue.

If you are exposed to someone with COVID-19, you should contact the Student Health Center to get tested three to five days following exposure and follow the guidance recommended by the

Health Center. If you are not fully vaccinated, you should follow quarantine protocols found at https://coronavirus.olemiss.edu/students/.

Non-adherence with Health Requirements

Currently, COVID-19 guidelines for the Spring 2022 semester include face masks for vaccinated and unvaccinated people inside University buildings; therefore, students should not be in classroom spaces when they are out of compliance with these guidelines unless they have an accommodation approved by Student Disability Services.

The University's Academic Conduct and Discipline Policy states that "disorderly behavior that disrupts the academic environment violates the standard of fair access to the academic experience." Failure to adhere to health requirements during the COVID-19 emergency will be deemed as disruptive to the classroom and will be enforced following the Academic Conduct and Discipline procedures.

The University of Mississippi has adopted a tiered disciplinary protocol for non-adherence to COVID-19 health requirements. This disciplinary protocol is maintained by the Office of Conflict Resolution and Student Conduct: https://conflictresolution.olemiss.edu/covidupdates.

Tentative Exam Dates/Content

Exam 1 – Thursday 2/17 – Ch. 5-7

Exam 2 – Thursday 3/24 – Ch. 8-11

Exam 3 – Thursday 4/21 – Ch. 15; Ch. 1-4 (Volume 3)

Final Exam – Tuesday 5/3 [8:00 am (Section 1)] [12:00 pm (Section 2)]