

Physics 221 Syllabus

"Laboratory Physics for Science & Engineering I"
University of Mississippi – Fall 2025 – Section T.B.D.

Instructor of Record and Final Arbiter of Grades

Dr. Bin Xiao
106, Lewis Hall
bxiao@olemiss.edu

Lab Physicist

Mr. Raymond Siedlecki
Room 121A, Lewis Hall
rdsiedle@olemiss.edu
Office Phone: (662)-915-7980

Assistant Lab Physicist

Dr. Josh Moore
jmoore10@go.olemiss.edu

Teaching Assistant

T.B.D

Professor Office Hours

By Appointment

Lab Physicist Office Hours

By Appointment or Serendipity -
Appointments can be made
by email.

Assistant L.P. Office Hours

By Appointment or Serendipity -
Appointments can be made
by email.

TA Tutoring Hours

See Tutoring Schedule for
Location and Time

Course Description

Laboratory experiments coordinated with lecture topics in Physics 211 (Physics for Science & Engineering I)

Course Objectives

Through the collection and analysis of physical data, students will develop both a conceptual and quantitative understanding of physical phenomena. Students will also learn to clearly communicate about experimental processes, results, and uncertainties.

Required Personal Equipment

All students are required to bring a dedicated lab notebook, pen, and scientific calculator (without internet access) to the lab each session. (The Lab Physicist's recommended calculator is the Texas Instruments TI-30X IIS (or similar)).

Prerequisites

A working knowledge of mathematical problem-solving methods including Algebra, Trigonometry, and Calculus.

Corequisites

Physics for Science & Engineering I
(Physics 211)

The main source of information about this course including the lab manual and lab schedule is our course website:
<https://www.phy.olemiss.edu/lab/>

The Weekly Agenda/Grade Architecture

- 1) Prepare yourself prior to your lab section by understanding the advanced reading assigned in the lab manual, reading about the week's experiment and procedure in the lab manual, and printing and completing week's prelab (found on the course website.)
- 2) Turn in your printed and completed prelab BEFORE the beginning of the daily quiz. Prelabs are worth **10%** of your final grade. Late prelabs will not be accepted.
- 3) Turn in your completed lab report (if applicable). Lab reports are due as announced on the lab schedule. Lab reports must be submitted in paper form *AND* electronically to Blackboard. Lab reports are considered late until both forms have been submitted. Lab reports are worth **40%** of your final grade. Late lab reports will be immediately penalized with a 10% deduction. After 48 hours, a grade of "zero" will be assigned.
- 4) Take (and pass) a 10-minute quiz on the experiment you about to perform. Questions may be drawn from the advanced reading assigned in the lab manual, the prelab assignment, or the lab manual itself. Quizzes are worth **20%** of your final grade. Extra time for the quiz will not be provided for late arrivals (even if the quiz ends early).
- 5) Complete the experiment and corresponding datasheet (if applicable). Your datasheet will be due at the end of the lab period unless otherwise noted (by written instruction or TA announcement). Datasheets are worth **30%** of your final grade. (Late datasheets will be penalized 10%. After 48 hours, a grade of "zero" will be assigned.)

Minimum Guaranteed Grades:

A	(percentage $\geq 92\%$)	C+	($77\% \leq \text{percentage} < 80\%$)
A-	($90\% \leq \text{percentage} < 92\%$)	C	($70\% \leq \text{percentage} < 77\%$)
B+	($87\% \leq \text{percentage} < 90\%$)	D	($60\% \leq \text{percentage} < 70\%$)
B	($82\% \leq \text{percentage} < 87\%$)	F	(percentage $< 60\%$)
B-	($80\% \leq \text{percentage} < 82\%$)		

Any grade dispute must be accompanied by the graded material in question if it has already been returned to the student. Final grades may be adjusted by the instructor of record to account for different grading styles across sections. Students should monitor their grade on *Blackboard* to ensure no “data entry” mistakes are made. Any requests to correct grading mistakes must be brought to the attention of the Lab Physicist *prior* to the start of finals week!

Each student will have their lowest datasheet grade, lowest quiz grade, and lowest prelab grade dropped from their final grade calculation. All lab report grades will be included in students’ final grades. Final letter grades are at the discretion of the Instructor of Record and may fall outside the “minimum guaranteed” ranges in special cases (e.g., academic misconduct, poor attendance, extenuating circumstances, etc.).

Attendance Policy

Lab attendance is mandatory to receive a grade; work will not be accepted from any student not physically present during their assigned lab section. A grade of “zero” will be assigned for absences. Changes to a student’s lab section must be approved by the lab physicist and will only be granted for legitimate and necessary reasons.

Accommodations for university-approved absences from lab or absences from lab resulting from a civic, religious, or personal duty should be discussed with the Lab Physicist in advance of the absence. Accommodations for unexpected absences due to illness or other unpreventable personal emergencies should be discussed with the Lab Physicist as soon as the student is able. *Please do not attend lab if you are ill with symptoms of any contagious disease!*

Requests for make-up labs MUST be accompanied by a letter or email (including contact information) from an authority figure (e.g., medical doctor, personal lawyer, superior officer, university official, etc.) deeming the absence necessary. In the case of wedding or funeral attendance, a program (or similar proof of attendance) may be requested.

Lab Rules and Policies

Lab rules and policies can be found on the course website. These should be reviewed and followed at all times.

University Policies

We will abide by all university policies including (but not limited to) academic integrity (M Book, Section I), disability accommodation (M Book, Section V), nondiscrimination (Ole Miss Policy Number: 10000632), and attendance verification (<http://olemiss.edu/info/gotoclass/>).

Academic Misconduct will not be tolerated. Lab-Specific details may be found on the course website. *Plagiarism attempts WILL be treated as a serious violation of academic integrity and will be penalized.* Penalties range from a reduction in the offending student’s grade to complete expulsion from the university. *The use of generative “artificial intelligence” tools (e.g. ChatGPT) to assist with lab work will be considered a violation of the academic integrity policy.*

Students seeking a reasonable accommodation to assist with course requirements in the face of a relevant disability should contact The Office of Student Disability Services (662-915-7128 or sds@olemiss.edu) and notify the instructor at the beginning of the course or as soon as an accommodation is approved.

Intellectual Property

All materials distributed in this course (electronically or in hardcopy) are protected under intellectual copyright. Any attempt to share these materials publicly, by publishing them on the internet or otherwise, or to profit from their use or distribution in any way constitutes theft and will be in violation of intellectual property law and the UM Academic Conduct Code.

Video and/or Audio recording in the lab is forbidden unless explicit consent is given by the Lab Physicist.