

# SYLLABUS

## PHYS 231 FALL 2015

### INSTRUCTOR CONTACT INFORMATION

Instructors: Stan Dodds  
Offices: 215 Herzstein Hall  
Email: dodds@rice.edu  
Office Hours: Any time I'm in

### COURSE OBJECTIVES AND LEARNING OUTCOMES

In this laboratory course students will observe wave and optical phenomena presented in PHYS 201.

By the end of the course, students will have demonstrated the ability to

- Align and manipulate simple optical apparatus
- Acquire reliable data illustrative of the phenomena discussed in PHYS 201
- Present their results in a written technical report

### TEXTS AND MATERIALS

The laboratory manual is available in pdf format at <http://www.owlnet.rice.edu/~dodds/phys231.html>. Assistance is available from Dr. Dodds in HRZ 215.

Apparatus for each week's exercise will be available in HRZ B18. You may obtain the door code from Dr. Dodds in HRZ 215. The building is accessible outside of normal hours with a Rice ID through the north-side door (facing Duncan Hall).

The experimental work is semi self-paced, in that you may work at any time during the lab weeks listed. Each exercise will require 2-4 hours in lab to complete the measurements, plus additional time to prepare a report.

### REPORT DEADLINES

The graded work for the semester will consist of a short report on each laboratory exercise, due according to the following schedule:

week of	exercise
Aug. 24	None; First week of classes
Aug. 31	Coupled Oscillations(and electronics as needed)
Sep. 7	Coupled Oscillations, continued; Due Friday
Sep. 14	Standing Waves; Due Friday
Sep. 21	Acoustics of the Recorder; Due Friday
Sep. 28	None
Oct. 5	Transmission Lines; Due Friday
Oct. 12	None; Midterm break
Oct. 19	Reflection and Refraction; Due Friday
Oct. 26	Optical Instruments; Due Friday
Nov. 2	None
Nov. 9	Polarization; Due Friday
Nov. 16	Interferometers
Nov. 23	Interferometers, continued; Due Wednesday; Thanksgiving break
Nov. 30	Physical Optics; Due Friday; Last week of classes

Reports are due by 5 PM on the last day of the scheduled experiment period. Note that the amount of equipment is limited, so it will be impossible for all students to undertake an experiment immediately before a deadline.

## **GRADE POLICIES**

Early submissions are always welcome, while late work will be penalized at the rate of 5 percentage points per day or fraction late. Reports will not be accepted more than 7 days after the due date or the first day of finals, whichever is earlier.

## **RICE HONOR CODE**

In this course, all students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at <http://honor.rice.edu/honor-system-handbook/>. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process.

You may work with a partner if you wish, but it is not required. In any case, each student is expected to be familiar with all phases of the experiment and to produce an independent report of the results.

## **DISABILITY SUPPORT SERVICES**

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Support Services (Allen Center, Room 111 / [adarice@rice.edu](mailto:adarice@rice.edu) / x5841) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

## **SYLLABUS CHANGE POLICY**

This syllabus is only a guide for the course and is subject to change with advanced notice.