

<p>CHAMINADE UNIVERSITY PHY-252L: UNIVERSITY PHYSICS I LABORATORY COURSE SYLLABUS – SPRING 2011</p>

Instructor: Matthew Cochran
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Office: Henry Hall 7
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Office Hours: Monday through Thursday 12:00 to 1:00 or by appointment
Course Time: Wednesday or Friday from 2:00 to 4:50
Course Room: Henry Hall L10
Prerequisites: Concurrent enrollment in PHY-251 is assumed.
Required Text: None. Handouts will be provided.
Other Materials: Scientific Calculator and Lab Coat

COURSE DESCRIPTION:

This is an introduction to laboratory techniques and experiments that illustrate and apply basic physics principles presented in lecture. Students will have the opportunity to apply the scientific method in collecting and analyzing data.

COURSE OBJECTIVES:

Upon successful completion of the course, students will be able to:

- Make careful measurements of physical quantities.
- Estimate the uncertainties and demonstrate a knowledge of statistical analysis.
- Present results graphically and make calculations using a computer when appropriate.

EVALUATIONS AND GRADING SCALE:

Worksheet Labs Reports (14)

90%	–	100%	.....	A
80%	–	90%	.....	B
70%	–	80%	.....	C
60%	–	70%	.....	D
0%	–	60%	.....	F

Incomplete grades (I) will be given in accordance with college regulations as outlined in the college catalog. Withdrawals (W) from the class are the responsibility of the student and deadlines are set by the college.

LAB REPORTS:

There are fourteen labs during the semester. They will be in the form of worksheets and should be completed in class and turned-in before leaving.

Although students will work in groups on experiments, lab assignments are individual preparations. Each student is responsible for their own interpretation of results.

ATTENDANCE:

Each student is expected to attend every lab. Arrive on time. Makeup labs will only be given under extenuating circumstances beyond the student's control. If a student knows in advance of an absence, inform the instructor as soon as possible.

SAFETY:

No food or drinks are allowed in lab. In addition, student must wear lab coats and closed-toed shoes at all times. Slippers are not allowed.

TENTATIVE SCHEDULE:

Week	Lab
1	Charge
2	Electric Potential
3	Circuits I
4	Circuits II
5	Ohm's Law
6	RC Circuits
7	Magnets and Magnetic Interactions
8	Simple Electric Motor
9	Inductors
10	The Speed of Sound
-	No Lab
11	Interference and Diffraction
12	Geometric Optics I
13	Geometric Optics II
14	No Lab
15	Atomic Spectra