

CHAMINADE UNIVERSITY
PHY-252L: UNIVERSITY PHYSICS II LABORATORY
COURSE SYLLABUS – SPRING 2020

Instructor: Matthew Cochran
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Office: Henry Hall Office 123A
Office Phone: 739-8361
Course Time: Tuesday, Wednesday, or Thursday from 2:30 to 5:20
Course Room: Henry Hall L10
Prerequisites: Concurrent enrollment in PHY-252.
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	60%
Quizzes	20%
Exam	20%
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. 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. Make-up 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, students must wear lab coats and closed-toed shoes at all times. Slippers are not allowed.

MUSIC DEVICES AND CELLPHONES:

Unless specifically permitted by your instructor, use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, as it is discourteous and may lead to suspicion of academic misconduct. Students unable to comply will be asked to leave class.

ADA ACCOMODATIONS:

Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from CUH Counseling Center (Dr. June Yasuhara, 735-4845) by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations. Please refer any questions to the Dean of Students and review procedures at: www.chaminade.edu/student_life/sss/counseling_services.php

TENTATIVE SCHEDULE:

Week	Lab
1	Hook's Law
2	Simple Harmonic Motion
3	Sound waves
4	Speed of Sound
5	Charge
6	Circuits I
7	Circuits II
8	Ohm's Law
9	DC Circuits
10	RC Circuits
11	Magnets and Magnetic Interactions
12	Interference and Diffraction
13	EXAM
14	Geometric Optics
15	Make-up (Hydrogen Spectrum)