

CHAMINADE UNIVERSITY  
PHY-251L-01: UNIVERSITY PHYSICS I LAB (Friday)  
COURSE SYLLABUS – FALL 2012

**Instructor:** Matthew Cochran  
**Email Address:** matthew.cochran@chaminade.edu  
**Office:** Henry Hall 7  
**Office Phone:** 739-8361  
**Course Time:** Friday from 2:30 to 5:20  
**Course Room:** Henry Hall L10  
**Prerequisites:** Concurrent enrollment in PHY-251 is assumed.  
**Required Text:** None. Handouts will be provided.  
**Other Materials:** Scientific Calculator, 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 such as distance, time, force, and velocity using various scientific instruments.
- 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) . . . . .	80%
Quizzes. . . . .	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. They will be in the form of worksheets. Labs should be competed 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.

**QUIZZES:**

A short quiz will be given at the beginning of each lab. The quiz will test your understanding of the most recent lab. You may use your lab report while taking the quiz. No make-up quizzes will be given.

**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. Student must wear closed-toed shoes at all times. Slippers are not allowed. Lab coats must be worn at all times.

**TENTATIVE SCHEDULE:**

Week	Date	L#	Topic
1	Aug 31	1	Units and Significant Figures
2	Sep 07	2	Representations of Motion
3	Sep 14	3	Motion of a Ball
4	Sep 21	4	Projectile Motion I
5	Sep 28	5	Projectile Motion II
6	Oct 05	6	Statics
7	Oct 12	7	Hooke's Law
8	Oct 19	8	Inclined Plane
9	Oct 26	9	Cart Dynamics
10	Nov 02	10	Collisions
11	Nov 09	11	Impulse and Momentum
12	Nov 16	12	Rotational Statics
13	Nov 23	<b>H4</b>	<b>Thanksgiving – No Class</b>
14	Nov 30	13	Harmonic Motion
15	Dec 07	14	Buoyancy (course evaluations)

**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](http://www.chaminade.edu/student_life/sss/counseling_services.php)**