

<p style="text-align: center;">CHAMINADE UNIVERSITY PHY-251L: UNIVERSITY PHYSICS I LAB COURSE SYLLABUS – FALL 2011</p>
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**Instructor:** Matthew Cochran  
**Email Address:** matthew.cochran@chaminade.edu  
**Office:** Henry Hall 7  
**Office Phone:** 739-8361  
**Course Time:** 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, 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 (13)	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 thirteen labs during the semester. They will be in the form of worksheets. Labs 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.

**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 students 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	Friday	Lab
1	Aug 27	Lab 1: Units and Significant Figures
2	Sep 03	Lab 2: Representations of Motion
3	Sep 10	Lab 3: Motion of a Ball
4	Sep 17	Lab 4: Projectile Motion I
5	Sep 24	Lab 5: Projectile Motion II
6	Oct 01	Lab 6: Hooke's Law
7	Oct 08	Lab 7: Inclined Plane
8	Oct 15	Lab 8: Cart Dynamics
9	Oct 22	Lab 9: Collisions
10	Oct 29	Lab 10: Impulse and Momentum
11	Nov 05	Lab 11: Rotational Statics and Dynamics
12	Nov 12	Veteran's Day
13	Nov 19	Lab 12: Harmonic Motion
14	Nov 26	Thanksgiving
15	Dec 03	Lab 13: Buoyancy (course evaluations)