SYLLABUS

Physics for Scientists & Engineers I
PHY 2048, Section 4
Fall Semester, 2007
Tu-Th 9:00 to 10:15, MAP 359

Instructor: Dr. Beatriz Roldán-Cuenya
Office Hours: T-Th 10:30-12:00 pm
Office: MAP422
e- mail: roldan@physics.ucf.edu
Phone: (407) 823 1883
Webpage: http://physics.ucf.edu/~roldan

PHY 2048 is the first of a two-semester general physics course. This is a three credit hour course.

Textbook: Physics for Scientists and Engineers, Seventh Edition, vol.1, Raymond A. Serway and John Jewett.
A web-assign homework access card must be purchased at the UCF bookstore.

Course Objectives and Expectations:

The primary objective of the course is to prepare students with fundamental knowledge of physics and obtain skills necessary for higher-level science and engineering courses.

The course is quite intense, and it will require you to invest considerable time in study and problem solving. To obtain maximum benefit from this course you should read the material before and after it is covered in class. It is very difficult to catch up if you fall behind. Class attendance is very important since some of the exam questions will be drawn from the class lectures, demonstrations and discussions.

Pre-requisites:

An adequate preparation in basic mathematics is essential for a proper understanding of the course material. Basic concepts from algebra, trigonometry, differential and integral calculus will be used.

Course Structure:

- **Lectures**: Tuesday/Thursday.
- **Homework assignments:** Thursdays. Homework assignments will be given every week (WEB-ASIGN). It is very important to solve these problems, since they constitute the primary means for learning the material for the exams.
- **Quizzes**: Twice per month. They will be short, one to four questions (10 minutes). There will be no make-up quizzes.

- **Mid-term Exams**: There will be three written "in-class" exams (about 50 minutes each). They will contain 3-4 problems similar in difficulty to those given as homework.
- **Final Exam:** 6-8 problems. All examinations are without books.

Grades:

The final grade will be calculated according to the following scheme.

Homework (WebAssign) → 15%
Quizzes → 10%
Tests (three) → 45%
Final → 30%

Grading Scale:

A	85-100
B	75-84
C	60-74
D	50-59
F	0-49

Grades are not given out in response to e-mail messages or telephone calls.
+,- grades will be given.

Policies:

1. Questions regarding returned quizzes and tests must be brought to the instructor's attention within two days.
2. Make-up tests are given only to students who have to be out of town on university-sponsored activities. Prior permission and proper documentation will be required. Exceptions are to be made for medical and family emergencies, at the discretion of the instructor.
3. Scientific calculators with trigonometric capabilities are allowed in quizzes and tests. However, calculators with preprogrammed physics information are not allowed. Violation of this rule might result in automatic failure in the course and disciplinary proceedings might be initiated.
4. Picture ID is required in all tests, quizzes and final exam.

Important Dates:

- Classes begin → August 20
- Withdrawal Deadline → October 12
- Classes end → December 3
- Holidays → Labor Day: September 3

- Veteran´s Day: November 12
- Thanksgiving: November 22-24

Course Tentative Schedule:

Book Chapter	Topic	Date
Chapter 2	1-D Motion	August 21, 23
Chapter 3	Vectors	August 28, 30
Chapter 4	2-D Motion	September 4, 6
Chapter 5	Force and Motion I	September, 11, 13
Chapter 6	Force and Motion II	September 18, 20
Exam #1		**September 25**
Chapter 6	Force and Motion II	Sept. 27
Chapter 7	Energy and Work	October 2, 4
Chapter 8	Potential Energy	October 9, 11
Chapter 9	Linear momentum	October 16, 18
Exam #2		**October 23**
Chapter 10	Rotation	Oct. 25, 30, Nov 1
Chapter 11	Angular Momentum	November 6, 8
Chapter 12	Static Equilibrium	November 13, 15
Exam #3		**November 20**
Chapter 15	Oscillations	November 27, 29
Final Exam		**To be arranged**