PHY 2054 (STUDIO), Sections C0003
College Physics II, Fall 2015

Instructor: Dr. Hari P. Saha; Office: PSB405; e-mail: Haripada.Saha@ucf.edu

Class Hours & Place: Monday, Wednesday and Friday 7:30 am – 9:20 pm, MAP 350

Office Hours: MWF 10:00 – 11:00 AM

The book may include the Web-assign access code as well as iClicker

Lab Manual (Studio): Available at UCF Book Store, Tel: (407) 823-2665

Prerequisites: College Physics I

Homework: An average of 5 to 10 problems will be assigned for Homework. You must use www.webassign.net web site for these problems. You can get an access code for this website with every new book you buy or you can purchase an access code at the bookstore or via the web. The Web-assign name of this class is PHY2054, Section 0003. You will have to self enroll to the class and the instructions for self-enrollment will be obtained in the web-assign. Please use your NID as the Username. To self enroll you also need a Class Key. The Class key for your class is ucf 8742 8740

Quiz: At the end of each chapter a quiz will be given in the class on the next day and you will have 10 minutes to answer this quiz.

Examinations: There will be 3 tests in the class and a comprehensive final. Tentative dates of Exam are provided in page # 3.

Grades: The final grade will be decided on your performance in 3 test scores, the Final, Homework, the quizzes and the iClicker scores. The grade point will be based on as follows:

Three 1 hour tests (each 15%) 45 %; Final 15%; Homework 10%; Quizzes 10%; Lab 15% and iClicker 5%; Total 100%

Letter grades will be determined using the following scheme:

85 - 100 A, 75 - 84 B, 60 - 74 C, 45 - 59 D, Less than 45 F
Course Objectives:

(1) To enable students to understand the concepts of Physics
(2) To improve problem solving ability.

Important

“As of Fall 2014, all faculty members are required to document students’ academic activity at the beginning of each course, please complete the following academic activity by the end of the first week of classes, or as soon as possible after adding the course, but no later than August 28. Failure to do so will result in a delay in the disbursement of your financial aid”

Remember: A syllabus quiz is provided as an assignment. You must complete this assignment by August 28.

Course Syllabus:

The course consists of three two 2 hours classes each week. The course material covers Electricity & Magnetism and Optics. In the studio format we will combine a short lecture/demonstrations, recitation, and laboratory experiments together on the material which will be covered each week. The main objective for this class is to understand basic fundamentals of electricity, magnetism and optics and their applications in real life experiences. This class will help you to think, interpret them in terms of theories and verify them by performing experiments. It is strongly advised that students read through the material at least once before coming to class. The assigned homework problems are not to be regarded as the minimum work necessary to learn the material. You should plan to work all the odd numbered problems (for which the answers are given at the back of the book) in order to be prepared for the tests and the final.

In the class the students are required to work in groups consisting of approximately 3 in each group. Each student in a group will participate actively in discussions, performing experiments, solving problems and short presentations.

Lab Units: The lab manual consists of several units. Each unit includes brief discussion of the material corresponding to each experiment. There will be few questions on the materials. Each member of the group will be asked to write down your prediction after discussion and verify your answers after performing experiments and writing the results. Each member of the group will be required to submit this report. These lab reports will be graded.

Clickers: You will be using iClicker feedback system in the class. You will have to buy the “iClicker” module from the bookstore to answer very simple question from the reading assignments as well as discussed material in the class. Information about registering your iClicker is provided in the website: http://www.iclicker.com.
Tentative Schedule: An approximately one chapter will be covered each week. It is expected that material will be covered according to the schedule, although adjustments will be made if necessary to cover the material at a more appropriate rate. You should read the relevant text book chapter(s) before coming to class.

Attendance: Because it is activity based class, attendance in each class is extremely essential. If you miss one class, you will not be able to make it up. I suggest that you attend each of the classes without fail.

Chapters to be Covered during the Semester:

Chap. 18: Electric forces and Electric fields
Chap. 19: Electric Potential Energy and the Electric Potential
Chap. 20: Electric Circuits
Chap. 21: Magnetic Forces and Magnetic Fields
Chap. 22: Electromagnetic Induction
Chap. 23: Alternating Current Circuits
Chap. 24: Electromagnetic Waves
Chap. 25: The Reflection of Light: Mirrors
Chap. 26: The Refraction of Light: Lenses and Optical Instruments
Chap. 27: Interference and the Wave nature of light

Tentative Examination Dates:

<table>
<thead>
<tr>
<th>Test #</th>
<th>Day</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>#1</td>
<td>Friday</td>
<td>September 18</td>
</tr>
<tr>
<td>#2</td>
<td>Friday</td>
<td>October 16</td>
</tr>
<tr>
<td>#3</td>
<td>Wednesday</td>
<td>November 4</td>
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<tr>
<td>Final</td>
<td>Monday</td>
<td>Dec. 14, 7:00 am - 9:50 am</td>
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Important Dates:

- Classes begin: August 24
- Drop/Swap deadline: August 27
- Add deadline: August 28
- Withdrawal Deadline: November 2
- Classes End: December 7

Make-up Policy

1. Questions regarding returned quizzes, and tests must be brought to the instructor's attention within two days.

2. Make-up missed work should only be permitted for the following: Family emergency, Religious observance, University sanctioned activities or bona-fide medical emergency. Justifying documentation must be provided in every case.
3. No make-up quizzes are given.

4. Picture ID is required in all tests and quizzes.

5. Scientific Calculators with trigonometric capabilities are allowed in quizzes and tests. However, calculators must not have any preprogrammed physics information.