

Hiram College

SYLLABUS

Physics 113: Principles of Physics I

Fall 2007

Professor: Dr. Joseph Gallant {
Office: Colton, Room 5
Phone: 330-569-5244
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Class: MWF, 1:15 – 2:35 PM, Colton, Room 2

Textbook: Physics (6th edition), Douglas Giancoli

Website: <http://home.hiram.edu/www/physics/Phys113/syllabus113.htm>

Class Notes: http://home.hiram.edu/www/physics/Phys113/class_notes.htm

Lab Hours: Tuesday 1:30PM – 4:30PM, Thursday 8:30AM – 11:30 AM, Colton, Room 17

Office Hours: After class (MWF 2:35 PM – 4PM), and by appointment.

Course Goals: To successfully navigate our way on a fun and informative journey through the first fifteen chapters of the text while maintaining our sanity.

Requirements: There will be three in-class exams and a comprehensive final exam. Homework problems will be assigned each week, which I will grade and return to you. We will also perform nine experiments, each of which will require some written work.

Grading: {
Homework: 20%
Exams: 40%
Lab: 20%
Final Exam: 20%

Homework: I will assign homework problems from the textbook each Monday in class. These problems are due the following Monday, when I will make the solutions public. Once the solutions are public, the homework is late and I will not accept it. It is important that you keep up with the material!

Exams: We will have an exam every three or four chapters. All exams are closed-book, closed-note, but I will provide an equation sheet. There will be at least one multi-part problem from each chapter we cover. As each exam approaches, I will narrow down the relevant material.

Labs: We will perform nine experiments. Your overall lab grade will be based on one formal laboratory report and its re-writes, as well as your lab notebook and your performance during the experiments. At the end of each lab, the instructor will have a discussion with each group to answer questions and make sure you understood what the lab was about: what was measured, why it was measured and how the results were determined. You will be required to buy a lab notebook (a composition book, quadrule ruled) and to keep your lab notes, data and analysis in those notebooks. They will be left in lab and checked by TA's.

Always come to your lab section unless you have previously made arrangements with **both** lab instructors. **Every** lab must be satisfactorily completed. If you do not pass the lab portion of the class, you do not pass the course.

Free Advice: When I pass out material, read it carefully!

Note: Please retain any and all graded materials I return to you. They serve as both a study guide for exams and a "receipt" in case you have a question about your grade.

Scientific Notebook: I am a big fan of Scientific Notebook. This powerful and inexpensive software is easy to learn and easy to use. SNB will save you a lot of work once you get the hang of it. While mastery of the program is not required, and we won't spend much class time on it, I am willing to spend time with anyone interested in trying and learning it. I have free 30-day-trial CDs that you can borrow. If you plan a career in a scientific or technical field, I recommend that you purchase and learn this software.

Open Door Policy: Learning physics is not easy; you will probably need help. Please feel free to visit me in my office with any and all questions. Questions are **always** welcome! Together, we can succeed.

Pep Talk: Physics is fun! Besides teaching you the basic principles and methods of physics, part of my job is to show you just how much fun physics is, and how relevant it is to your daily life. Yes, physics is a difficult subject, one that requires high-level quantitative and analytical reasoning skills, critical thinking and problem solving. These are all skills you can acquire. Learning physics is best done interactively. It is crucial that you come to class and that you participate! Working together is a good way to learn, as long as you're exchanging ideas and not answers. You really CAN do it!

Tentative Schedule

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Week	Class	Lab
1	Chapter 1	--
2	Chapter 2	Measurement
3	Chapter 3	1-d motion
4	Chapter 4 Exam 1 (1 – 3)	Force
5	Chapter 5	--
6	Chapter 6	Energy
7	Chapter 7 Exam 2 (4 – 6)	--
8	Chapter 8	Momentum
9	Chapter 10	Circular Motion
10	Chapter 11 Exam 3 (7, 8, 10)	Oscillations
11	Chapters 13 and 14	Temperature
12	Chapter 15, Review	Vaporization
Finals	Comprehensive	--