Course & Instructor Information

Physics 105 Fall 2014

Dear Students:
In this course you will learn about many topics of science that may seem on the surface to be unrelated. However, a closer look reveals that there are underlying scientific principles that have enabled humans to expand their understanding of the universe from atoms to galaxies and beyond. If you are fully engaged in this course, you will learn the importance and relevance of science and gain skills that will be useful throughout your lives.

Lecture (Moulton 208): MWF 3:00 - 3:50

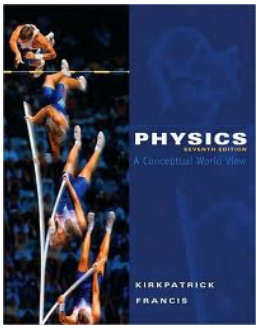
Lab (Moulton 203) -- (no lab the first week of classes)
Section 10 Monday 6:00 - 8:50 PM
Section 11 Tuesday 8:00 - 10:50 AM
Section 12 Tuesday 2:00 - 4:50 PM
Section 13 Wednesday 8:00 - 10:50 AM
Section 14 Wednesday 6:00 - 8:50 PM

Instructor: David T. Marx
e-mail: marx@phy.ilstu.edu
Office: Moulton 312F Phone: 438 - 5382
Office Hours: 11:00 - 12:00 T-W-Th
I will also often be available for live chat in ReggieNet and always available via e-mail.

Required Materials:

Textbook:

Physics: A Conceptual World View (seventh edition, 2010, ISBN: 0-495-39152-2) by Larry D. Kirkpatrick and Gregory E. Francis.



Lab Manual:

Experiments for Fundamentals of Physics(Physics 105 lab manual, 2014 edition). Each student must have their own, brand new lab manual.

Clicker:

A registered TurningPoint remote response pad (clicker) is required. This is available at both bookstores. This must be registered on your my.illinoisstate.edu (myISU) site. Any TurningPoint clicker will work with our system.

Calculator:

A basic calculator that can do exponents and trig. functions, etc. is good. A very complicated calculator that does graphing and has lots of functions is not needed, but is OK, if you already have one. If its too complicated and you do not fully understand how to use it, you would be better off getting a simpler scientific calculator for around $10.

Attendance / Class Policies

Attendance is critical to your success in this course. If you cannot attend lecture or lab, please find someone that takes good notes and get a copy. A large portion of your grade is for reading quizzes and for in-class participation. I will allow up to three absences without

penalty, not including exams, during the course. Of course, arrangements can be made for makeup following established university guidelines for family life events, jury duty, extreme illness, or university business.

If you are considering withdrawing from the course, please see me first.

To ensure everyone's full attention to the course, laptops, tablets, cell phones, iPods, and any other electronic devices (except clickers) should be turned off during lecture periods. No laptops may be used during lecture.

I know some people like to take notes using a computer. However, studies have shown that student learning is improved through taking hand written notes over computers. Secondly, tablets and laptops can be distracting to neighboring students.

Please be considerate of others in the class and keep talking with neighbors to a minimum, unless, of course, we are doing an interactive activity.

Reading Quizzes & Class Participation Exercises

At the beginning of the lecture period following an assigned reading, we will have a very short reading quiz using the interactive response pads. No calculator will be needed for these quizzes. The reading assignments will be assigned well in advance.

For reading quizzes, each correct answer receives 3 points and each incorrect answer receives 1 point. The three lowest scores for reading quizzes will be dropped.

Class participation exercises will not be pre-announced, in general. The three lowest class participation exercises will be dropped.

Homework

You should make every effort to do the assigned exercises on your own after the chapter is assigned and discussed in lecture to develop the required skills necessary to succeed in this course. The problems are given in lessons for each chapter. Answers will be provided for the assigned homework.

Lab Exercises

There will be 8 lab exercises that will be carried out during your registered laboratory meeting time in Room 203. The schedule is given below. Data and basic analysis will be done in the lab, but a report on the experiment will be written up outside of class and submitted at the beginning of lab the following week.

Details on report requirements will be given by your lab instructor. Each student must submit a **unique** lab report. Copied portions of lab reports will result in a grade of zero for all students involved.

Each student must have a new lab manual (4th edition, copyright 2014).

Week of	Lab Exercise
August 25	Circumference and mass of a giant disk

September 8	Addition of forces
September 15	Measuring *g*, the acceleration due to gravity
September 22	Newton's second law
October 13	Simple harmonic motion
October 20	Velocity of a projectile
November 3	Measurement of specific heat
November 17	Ohm's Law

Tests

There will be a few in-class, multiple choice tests given throughout the semester. These will be announced as soon as it is clear when the class has completed specific content for the test. The tests will be open notes and all equations and constants must be in your notes.

In general, no make up tests will be given. If you know you will be absent for a University approved reason for a test, you may schedule to take the test in advance. The lowest test score of all of the tests given during the semester will be dropped.

Anyone discovered cheating on a test will receive a zero for that test and your case may be referred to Community Rights and Responsibilities for disciplinary action for Academic Dishonesty.

Final Exam

The final exam will be given during our assigned time during final exams week. Details will follow. The test will be cumulative, but a handwritten or typed equation & constants sheet may be used along with a calculator. Cheating will result in a zero for the final.

Grading

Scale (subject to change)		Components	
A	89 to 100 %	In-Class Exercises	10 %
B	78 to 88 %	Reading Quizzes	15 %
C	68 to 77 %	Lab	20 %
D	58 to 67 %	Exams	35 %
F	< 58 %	Final Exam	20 %