

EASTERN NAZARENE COLLEGE

PY 202 General Physics

Spring 2006

INSTRUCTOR: John U. Free, john.u.free@enc.edu

HOMEWORK SESSION LEADERS: Joseph Cox, joseph.j.cox@enc.edu and Larry Simpson

DAILY QUIZZES: Personal Response System

HOMEWORK GRADERS: WebAssign and Joseph Cox

LABORATORY ASSISTANTS: Tim Troxler, Larry Simpson

DEPARTMENT SECTARY: Karen Lane

**Tell me and I'll forget;
show me and I may remember;
involve me and I will understand.
- CHINESE PROVERB**

OVERVIEW:

Physics is the study of the physical universe from both the microscopic and macroscopic vantage points. It ultimately seeks an explanation of the nature of matter and its interactions. Like many other disciplines, Physics is composed of interacting and overlapping topics (e.g., optics, thermodynamics, and mechanics). This course is designed as a survey of the whole of Physics and will seek to expose a common thread running throughout apparently disparate topics. The major topics covered this term are: **electricity and magnetism, circuit theory, optics, and modern physics, atomic, nuclear, and particle physics.**

OBJECTIVES:

- * to learn techniques of problem solving in the physical sciences.
- * to see "grand connections" among the various topics in physics.
- * to gain skills in the physical laboratory.

TEXT(S):

Physics for Scientists and Engineers, 1st edition, Randall Knight, Pearson Addison Wesley Publishing Company, ISBN 0-8053-8960-1.

OFFICE HOURS:

Office hours this term will be Monday and Wednesday 11:00-12:15 and 1:00-2:00; Tuesday and Thursday by appointment. Feel free to stop in anytime I am in the office (Shrader 17) or make an appointment with me, john.u.free@enc.edu or Karen Lane, karen.l.lane@enc.edu, the department secretary.

GRADING:

You may choose to have your grade computed in one of two ways. You can have two separate grades for the class and lab or the same grade for the class and lab. Your grade will be computed as follows:

Same grade for class and lab

exams	- 35%	homework	- 25%	laboratory	- 15%
quizzes/attendance	- 15%	final	- 10%		

Different grades for class and lab

Class grade

exams	- 35%	homework	- 30%
quizzes/attendance	- 20%	final	- 15%

Lab grade

laboratory	- 100%
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You must indicate to me by email which way to compute your grade by the second week of the course.

COURSE WEB PAGE

There is a course web page linked to my home page located at enc.edu/~john.u.free. Here you will find all the material needed for the course. I will also place the Power Point lectures on the course web page.

ATTENDANCE:

Regular attendance is expected. Laxity in this category will negatively affect your grade through the daily quizzes using the Personal Response System.

DAILY QUIZZES:

Short five to ten minute quizzes will be given in class using the Personal Response System. To prepare for the quiz you should read and take notes on the material assigned for each class. The quizzes will cover only material that is assigned in the reading for class. The **lowest three** quizzes will be dropped.

HOMEWORK:

Homework is assigned for each class and can be found on WebAssign. Since assignments are published well before their due date, there is **no excuse for late homework**. Assignments are due **the next class after they are assigned**. For example homework assigned on Monday is due on Wednesday. On exam days the homework is due the next class following the exam. Again this semester we will use the Internet and WebAssign (www.webassign.com/) to submit and grade your homework. All assigned homework will be submitted and graded by WebAssign.

There are times in the semester when this policy will be a hardship so there is a "grace period". **Six times during the semester you can turn in a class assignment the next class day after it is due without a penalty. Homework will not be accepted after two class days. All extensions must be requested from WebAssign using the extension option.**

EXAMS:

There will be three (3) exams throughout the term. The exam will consist of two parts. The first part will be **conceptual** multiple choice questions and **conceptual** short answer questions. The second part will be **problems**. Exam dates appear on the daily class schedule below.

FINAL EXAM:

The final exam is a multiple choice exam and scheduled by the registrar. The exam is cumulative and covers material studied throughout the semester.

HELP SESSIONS:

Problem solving help sessions will be held on Sunday, Tuesday, and Thursday evenings at 7:00 PM. These sessions will be totally devoted to helping you with your homework problems. You must come to the session prepared and have spent at least 15 minutes attempting each problem.

LABORATORY:

Laboratory exercises are an integral part of General Physics II and must be taken concurrently. The purpose of the physics laboratory is to allow the student to examine first-hand the concepts of the classroom and to reinforce the empirical nature of physics. Labs are held Thursday and Friday and start at 1:45 and 2:00. Each section will have a lab assistant who will have control over the operation and grading of the lab.

DISSABILITY:

Any student with a documented disability needing academic adjustments or accommodations is required to notify me during the first two week of the course. All discussions will remain confidential.

HONOR CODE:

You are required to submit work that is only yours unless you indicate otherwise, and permission from the instructor is granted. It is perfectly acceptable to work in groups on homework, but you must not simply copy work from someone else. If you copy work, or submit work that is not your own, you will automatically fail the course.