

PHYS 220, Introductory Physics I
Fall 2011
MTWF 1:25-2:15 PM
ROSS 0060

Instructor : Dr. Wendy Adams
Office : Office 0232C Ross Hall
Hours : MWF 11:00 – 1:00
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Objective:

This course will cover areas within classical mechanics, Thermodynamics, Waves and Sound. It provides content necessary to enable teacher licensure students to address [K-12 Colorado Model Content Standards in Science](#).

By the end of the course you should

- be able to identify systems of interest and interactions to solve problems, and based on their properties choose the best method to solve the problem, conservation principles or transfer, and implement it.
- be able to describe and calculate the behavior of simple objects acted upon by forces, including gravity.
- be able to describe and calculate wave motion and other wave effects.
- be able to define temperature and heat and qualitatively relate these problems to conservation of energy.
- be able to accept or reject standard theories based on measurements in the lab.

Prerequisite:

Algebra and basic trigonometry. This course involves intensive problem solving and a working knowledge of algebra is required.

Required Materials:

1. *College Physics* by Serway and Vuille 9th Edition
2. *Enhanced WebAssign Class Key: unco 7809 1531*
3. Scientific calculator – must have scientific notation and trig functions
4. Pencil and big eraser

Course Website:

<http://www.unco.edu/nhs/physics/faculty/adams/index.html>

Grading:

Method of Assessment	Approximate weight
Home Work	10%
Quizzes/In Class Activities	10%
Exams	40%
Final exam	20%
Lab	20%

The majority of grades will use the solid scale. I use + / - grades only for the few percent of the class that are on a border.

You must *show all your work* for credit on homework, quizzes and exams.

Homework:

Homework assignments will be assigned weekly and will generally be due each Tuesday *before* class begins. Late assignments will receive half credit if received before class begins on the following class day.

Homework assignments will be a combination of WebAssign and problems that are done long hand and turned in. Long hand problems will be graded on your work. Answers will be provided in advance for the long hand problems.

Quizzes:

There will also be online quizzes that serve as pre-reading assignments. There will also be a minimum of one quiz and/or in-class activity per week. One of each type of quiz will be dropped – no exceptions.

Online quizzes will be posted at least a day in advance of the deadline. It is advised that you complete the quiz with time to spare, as technical difficulties may arise and prevent you from completing the quiz on time.

You are responsible for verifying that you are getting credit for online work. It will not be possible to correct several missing items that were discovered at the end of the semester. Only one of each type of quiz will be dropped.

Exams:

All exam problems will be long hand type problems and graded on the work done. For this reason, I strongly recommend that you carefully work out each WebAssign problem set on paper as if you were going to turn in your work. This work can be used as future reference and is necessary practice for the quizzes and exams. Equations will be given on each exam.

Final Exam:

The final exam is cumulative and scheduled for Monday, December 5, 2010 from 1:30 PM to 4:00 PM. Students will be expected to take the exam at this time and should **NOT** make plans that conflict.

Student Expectations:

- Students are expected to work an average of 2 hours outside of class for each hour spent in class.
- Students are expected to follow UNC's Honor Code and Student Code of Conduct

<http://www.unco.edu/dos/communityStandards/index.html>

Disabilities:

Students with disabilities who believe they may need accommodations in this class are encouraged to contact Disability Support Services (970) 351-2289 as soon as possible to better ensure that accommodations are implemented in a timely fashion. Students with accommodations must provide the disability access form at least 3 days before accommodations are needed.

There will be no make-up exams or quizzes! If you are going to miss class, arrangements must be made in advance.

Everything on this syllabus is subject to revision throughout the semester; however, adequate notice will be given.