

# Physics 103: General Physics

Fall Term 2009

MWF 9:00-9:50

Human Ecology 138

## **Instructor**

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## **Textbook**

*College Physics*  
R. A. Serway and C. Vuille  
Pearson Prentice Hall, eighth edition, 2009  
ISBN-13: 978-0-495-38693-3  
ISMN-10: 0-495-38693-6

## **Course Overview**

This course provides an introduction to elementary classical physics, including the concepts of energy and momentum, the kinematics and dynamics of physical bodies, statics, gravitation, and other forces of nature. An emphasis is given on practical applications in diverse areas of science. This course involves mathematics in a minimalist fashion; calculus is not used, any needed mathematics beyond elementary algebra is developed and used in a self-contained manner.

## **Office Hours**

I hold office hours from 10:00 am until noon Mondays and Wednesdays. During these times I'll be in my office, and will be happy to meet with any student. Alternatively, students are encouraged to email or phone me to schedule an appointment. Please leave a voice message if I'm not in the office. I'll make every effort to accommodate you.

## **Homework**

I will assign a set of homework problems approximately once per week. Although these assignments will not count towards the final course grade, students would be remiss not to complete these assignments and to understand the solutions to all assigned problems, as the exam problems will be inspired by the homework problems.

## Exams

There will be two in-class midterm exams, and one final exam. See below for the respective dates. Each exam will be cumulative, meaning that all material covered up to that point will be tested. Only serious, utterly unavoidable, fully-verifiable excuses will be accepted to explain absence from any of the three examinations. In almost all circumstances, a missed exam will result in an exam grade of zero.

## Laboratory

There is a weekly laboratory session associated with this course. In all cases the laboratory sessions will be on Thursdays in Physical Science 105. Section 1 meets 8:00 am until 10:50 am. Section 2 meets 2:00 pm until 4:50 pm. Section 3 meets 5:00 pm until 7:50 pm. The first laboratory meetings will be on Thursday September 3. A separate laboratory syllabus will be distributed during the first lab meeting. Roughly half of your laboratory score is based on your regular attendance and attitude. The other half is based on the quality and correctness of your laboratory reports. At the end of the semester you will be assigned a score between 1 and 100 for your laboratory grade. This will count for 25 percent of your course score.

## Grading

You will receive a numerical grade for this course, computed using the following scheme:

Laboratory	25%
Midterm Exam #1	25%
Midterm Exam #2	25%
Final Exam	25%
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Total	100%

The numerical course grade will be converted to a letter grade using a fair and generous grading curve.

## Topics

We will cover the first eight chapters of the book this semester, roughly spending two weeks per chapter. A provisional outline is described by the following table,

Start	Chapter: topic
Aug 31	Chapter 2: One-dimensional motion
Sep 14	Chapter 3: Vectors and two-dimensional motion
Sep 28	Chapter 4: Newton's laws
Oct 12	Chapter 5: Energy
Oct 26	Chapter 6: Linear momentum
Nov 9	Chapter 7: Rotational motion and gravitation
Nov 30	Chapter 8: Rotational dynamics

This schedule may be modified depending on the pace of the class, but is useful as a rough guide. We may also discuss some alternate topics towards the end of the semester. Students should read the relevant chapters, preferably beginning before the nominal “start” date, and should aim to finish before the subsequent “start” date.

## Emergency Evacuation/Shelter-in-Place Procedures

In the event of an emergency evacuation (i.e., fire or other emergency), classes meeting in this building are directed to reassemble at [insert location from Emergency Procedures document] so that all persons can be accounted for. Complete details of the emergency evacuation, shelter-in-place, and other emergency procedures can be found at <http://www.oneonta.edu/security>.