

# PHYSICS SYLLABUS

Fall Semester, 2009  
Mr. Sol Aboulafia

## **Course Description:**

The major principles, concepts and applications of Physics will be reviewed while employing a mathematical, theoretical and hands-on approach to learning. Units of study during the fall semester include an introduction to physics (dimensional analysis, accuracy and precision, graphing); mechanics (motion, forces, gravitation, energy, work, momentum) and thermodynamics (temperature, thermal energy, laws of thermodynamics, calorimetry).

**Text:** Physics: Principles and Problems (Glencoe-McGraw Hill). Replacement cost \$71.

The following course outline is designed to serve as a guide with an approximate time limit set for each section.

<b><u>Course Outline</u></b>	<b><u>Corresponding Chapter in Text</u></b>	<b><u>Time (weeks)</u></b>	
Intro to Physics & Measurement	1	2.0	
Velocity and Acceleration	2, 3	3.0	
Forces, Laws of Motion	4, 5	3.0	
Two-dimensional motion, gravitation, angular motion	6, 7, 8	3.0	
Momentum, collisions	9	1.5	1.5
Energy, work, simple machines	10	1.5	
Conservation of energy	11	1.5	
Thermodynamics	12	2.0	
Review, Mid Term Exam		.5	

## **Grading:**

The Fulton County grading scale is as follows:

A: 90 – 100

B: 80 - 89

C: 70 - 79

F: Below 70

Grades are determined by the following percentages:

Tests: 35 %

Final Exam: 15 %

Daily (labs,quizzes) 40%

HW: (Web Assign) 10%

## **Submitting work for grades:**

**Homework** – will include worksheet problems given by the instructor, outside readings, and problems given on Web Assign. Homework is due the day after it is given with the exception of the Web Assign problems which are due the end of the week. Of course there may be extenuating circumstances when work cannot be turned in on the due date and that will be discussed on an individual basis.

**Labs** – written lab reports are due two days following completion of the lab unless otherwise indicated. The format will be discussed during the first day or two of class. Lab reports should be typed, with graphs and charts included as needed. Because lab