Physics 151 College Physics 1, Fall 2010
MWF 10:00-10:50 AM
Henry Hall, Room 124

Instructor: Eric Dodson Office: Wesselkamper 110
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Office hours: M,Tu,W,F 1:00-2:00 PM; and by appointment
I will also hold a weekly problem solving session
[Time and location to be announced]

Text : Physics,4th edition, James S. Walker; Chapters 1-13,15-18.

Prerequisites: MA 110 and concurrent registration in PHY151L

Content: Course provides an algebra-based introduction to mechanics, fluids and thermodynamics. See the schedule below for a detailed list of course content

Grading: The course grade will be based on:

Attend./Part.	5%
Homework	15%
Quizzes	15%
Midterms	45%
Final Exam	20%

With the following cutoffs: A=86-100, B=71-85, C=56-70, D=45-55, F=<45

Website: TBA

Homework: Homework will be collected each Friday (excluding weeks with midterms). Homework assignments can be found on the class website. I encourage you to work together on homework, but you must turn in your own work. Remember the main purpose of the homework is to help you understand the material.

Quizzes: A ten to fifteen minute quiz will be given promptly at the beginning of class on selected Fridays (To be announced the previous class day). Each student's lowest quiz score will be dropped at the end of the term.

Midterms: Three midterms will be given. Sample midterms can be found on the class website. Our midterms will consist of twenty multiple choice problems worth three points apiece and two twenty point problems that will be graded for partial credit. The midterms will be closed book, closed notes. A formula sheet will be provided. A copy of the formula sheet is available on the class website

Midterm I	Friday, September 17 (Chapters 1-4)
Midterm II	Friday, October 15 (Chapters 5-8)
Midterm III	Friday, November 12 (Chapters 9-13)

Final Exam: Date and Time: Thursday, December 9 10:30AM - 12:30PM
The final exam will be comprehensive

Helpful advice: Come to class every day. Read the sections to be covered (see schedule) before class. Ask questions. Get an early start on the homework and come get help if you get stuck. Print out a copy of the formula sheet and try to work the problems using only it. Stay on top of the material (Don't cram). If you are having difficulty come see me ASAP
Physics is not a spectator sport, the only way to get better is to practice.

Schedule: Shown below is a detailed schedule of the topics to be covered and the corresponding sections from the textbook. **Read the listed sections before class**

Week # Dates	Monday Topic Book Sections	Wednesday Topic Book Sections	Friday Topic Book Sections
1 (8/23-8/27)	Intro, Algebra Review Secs: 1-1	Coordinate Systems, Position & Displacement, Average Speed & Velocity Secs: 2-1,2-2	Average & Instantaneous Values, Acceleration Secs: 2-2-2-4
2 (8/30-9/3)	Motion with Constant Acceleration Secs: 2-5,2-6,2-7	Graphical Analysis of 1-D Motion Secs: 2-2,2-3	Vectors, Trig Review Secs: 3-1-3-6
3 (9/6-9/10)	Holiday: Labor Day	2-D Motion with Constant Acceleration Secs: 4-3-4-5	Projectile Motion Secs: 4-3-4-5
4 (9/13-9/17)	More Projectile Motion, Trajectories Secs: 4-3-4-5	Review For Exam 1	Exam 1 Chapters 1-4
5 (9/20-9/24)	Newton's Laws, Free-Body-Diagrams Secs: 5-1-5-4	Mass & Weight, The Normal Force, Elevator Physics Secs: 5-6-5-7	Static & Kinetic Friction Secs: 6-1
6 (9/27-10/1)	Inclined Planes Secs: 6-1	Circular Motion Secs: 6-5	Work & Kinetic Energy Secs: 7-1; 7-2
7 (10/4-10/8)	Gravitational Potential Energy, Conservative Forces, Work-Energy Equation Secs: 8-1-8-3	Conservation of Mechanical Energy, Work Done by Non-Conservative Forces Secs: 8-3-8-5	Power Secs: 7-4
8 (10/11-10/15)	Holiday: Columbus Day	Review For Exam 2	Exam 2 Chapters 5-8
9 (10/18-10/22)	Momentum & Impulse Secs: 9-1-9-3	Conservation of Momentum, Collisions Secs: 9-4-9-6	More Collisions, Center of Mass Secs: 9-7
10 (10/25-10/29)	Rotational Motion Definitions Secs: 10-1,10-2	Torque Secs: 11-1,11-2	Static Equilibrium Secs: 11-3
11 (11/1-11-5)	Newton's law of universal Gravitation Secs: 12-1	Springs: Hooke's Law Secs: 6-2	Periodic Motion (Mass & Spring) Secs: 13-1-13-4
12 (11/8-11/12)	Energy in Periodic Motion Secs: 13-5, 13-7, 13-8)	Review for Exam 3	Exam 3 Chapters 9-13
13 (11/15-11/19)	Density, Pressure Secs: 15-1, 15-2	Pressure vs. Depth in Static Fluid, Pascal's Principle Secs: 15-3	Archimede's Principle-Buoyancy Secs: 15-4, 15-5
14 (11/22-11/26)	Temperature, Heat, Specific Heat Secs: 16-1, 16-2	Ideal Gas Law, Latent Heat of Phase Changes Secs: 17-5, 17-6	Holiday: Day after Thanksgiving
15 (11/29-12/3)	First Law of Thermodynamics Secs: 18-1-18-4	More First Law, Second Law of Thermodynamics Secs: 18-5-18-7	Review for Final Exam