Physics 251 University Physics I, Fall 2013
MWF 10:30-11:20 AM, F 9:30-10:20 PM
Henry Hall Lab 10

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Office hours: M, Tu, Th: 3:00-4:00 PM; F: 11:30-12:30
And by appointment

Text : University Physics, (13th edition), Young and Freedman

Prerequisites: MA210, Concurrent enrollment in PHY251L is assumed

Content: This course is the first part of a year long introductory physics sequence focusing on the application of physical principles, logical reasoning and mathematical analysis needed to understand a broad range of natural phenomena. Topics include classical mechanics, fluids and thermodynamics

Grading: The course will be graded on a curve with the following breakdown

Homework, Attendance, Participation and Quizzes	15%
Midterms(3)	60%
Final Exam	25%

Website: TBA

Homework: Homework will be collected each week (excluding weeks with midterms). 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 and prepare for the midterms.

Midterms: Three midterms will be given. 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.

Midterm I	Friday, September 20
Midterm II	Friday, October 18
Midterm III	Friday, November 15

Final Exam: Date and Time: Monday, December 9; 11:00 AM-1:00 PM
The final exam will be comprehensive

Helpful advice: Come to class every day. Read the assigned sections from the textbook before class. Ask questions. Get an early start on the homework and come get help if you get stuck. Try to work the homework problems using only the formula sheet. 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.

The table below shows the proposed schedule of the material to be covered and the associated chapters from the textbook

Week	Topic(s)	Chapter(s)
1	Units, Coordinate Systems, Position, Velocity, Acceleration, 1-D kinematics	1,2
2	Motion with constant acceleration, Graphical analysis of 1-D motion, Vectors	1,2
3	2-D kinematics, Projectile motion	3
4	Projectile motion (cont.), Trajectories, Midterm 1	3
5	Newton's Laws, Free-body-diagrams, Weight and mass	4, 5
6	Friction, Circular Motion	5
7	Work, Kinetic Energy, Potential Energy	6, 7
8	More energy, Power, Midterm 2	6, 7
9	Center of Mass, Momentum, Collisions, Impulse	8
10	Rotational kinematics, Moment of Inertia, Torque, Rotational Dynamics	9, 10
11	Statics, Angular Momentum	9, 10
12	Simple Harmonic Motion	14
13	Fluids	12
14	Temperature, Specific Heat, Ideal Gas Law, Phase Changes	17, 18
15	Laws of Thermodynamics	19, 20

Policy on Cell Phones and Music Devices.

Because electronic devices, such as cellular phones, pagers, and musical devices can be disruptive to normal classes, the following is the policy for all Natural Sciences and Mathematics classes at Chaminade. Electronic devices are also prohibited during exams.

Use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, unless specifically permitted by your instructor. Use of cell phones and music devices in laboratories is a safety issue. In addition,use of cell phones and music devices in any class is discourteous and may lead to suspicion of academic misconduct. Students who can not comply with this rule will be asked to leave class and may be subject to laboratory safety violation fines. Please refer any questions to the Dean of Natural Sciences and Mathematics.