

Physics 252 University Physics II, Spring 2013
MWF 10:30-11:20 AM, F 12:30-1:20 PM
Ching Hall Room 253

- Instructor: Eric Dodson Office: Wesselkamper 110
Phone: 739-8363 email: eric.dodson@chaminade.edu
- Office hours: MTWThF 8:30-9:20 AM and by appointment
- Text : University Physics Volume Two, (13th edition), Young and Freedman
- Prerequisites: Physics 251
- Content: Course provides a calculus-based introduction to electricity and magnetism, circuits, waves, interference, optics, special relativity and selected topics in modern physics
- Grading: The course will be graded on a curve with the following breakdown
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|--|-----|
| Homework, Attendance, Participation and Quizzes | 15% |
| Midterms(3) | 60% |
| Final Exam | 25% |
- Website: TBA
- Homework: Homework will be assigned from the text or via the class website. I encourage you to work together on homework, but you must turn in your own work. The main purpose of the homework is to help you understand the material and serve as practice 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.
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|-------------|--------------------|
| Midterm I | Friday, February 8 |
| Midterm II | Friday, March 8 |
| Midterm III | Friday, April 12 |
- Final Exam: Date and Time: Thursday, May 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 | Charges, Electric Force | 21 |
| 2 | Electric Fields | 21 |
| 3 | Gauss's Law, Electric Potential Energy | 22, 23 |
| 4 | Electric Potential, Work and Energy, Midterm 1 | 23 |
| 5 | Electric Potentials and Fields, Capacitors | 23, 24 |
| 6 | Current, Circuits | 25 |
| 7 | RC Circuits, Magnetic Fields | 26, 27 |
| 8 | Magnetic Forces, Midterm 2 | 27, 28 |
| 9 | Induction | 29 |
| 10 | Waves, Sound | Supplemental Material |
| 11 | Waves, Electromagnetic Fields, Electromagnetic Spectrum | 32 |
| 12 | Geometrical Optics, Midterm 3 | 34 |
| 13 | Interference and Diffraction | 35, 36 |
| 14 | Special Relativity | 37 |
| 15 | Selected Topics in Modern Physics | Supplemental Material |

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.