Physics 196, Principles of Physics  
Fall, 2015  
Schedule #22714  
COURSE INFORMATION

Class Days: M W F  
Class Times: 8:00 – 8:50 AM  
Class Location: SHW-012  

Professor: Dr. Eric M. Bass  
Contact Information: ebass@ucsd.edu  
Office Hours Days: Monday and Friday  
Office Hours Times: 10:05 – 11:05 AM  
Office Hours Location: Physics 236

Course Overview

Catalog Description: Fundamental principles of physics in areas of electricity and magnetism. Designed for students requiring calculus-based physics.

This course emphasizes the basic principles of physics oriented toward engineering and the physical sciences. Student learning goals include mastering concepts of electrostatics and magnetostatics with an introduction to EM waves and AC circuits. Emphasis will be on concepts and skills for solving novel problems using tools introduced here and in PHYS 195.

Enrollment Information

Prerequisite: MATH 151 (concurrent OK) and PHYS 195 or equivalent  
Granting of admission to PHYS 196 does not guarantee satisfaction of prerequisite degree requirements.  
The last day to drop the course without a penalty is Sep. 4, 2015.

Course Materials

Required:  
• Textbook: Physics for Scientists and Engineers, 3rd Edition, Randall D. Knight (any other edition is fine)  
• Mastering Physics online homework account (Course code: MPBASS10651)  
• ParSCORE TEST FORM F-289-PAR-L (the narrow, red ones) for examinations

A calculator is recommended (use of phones is not permitted on exams).

Course Structure and Conduct

The course centers on lecture that includes description of concepts and working of examples. Student questions and discussion are strongly encouraged. Students are also very strongly encouraged to seek help from TAs assigned to this course (office hours TBA).

Exam scores, notes, solutions, and announcements will be posted on Blackboard.  
Homework and quizzes are administered through the Mastering Physics online system, accessible at  
http://www.pearsonmylabandmastering.com/northamerica/masteringphysics/ and discussed below. Mastering physics items will not be posted to Blackboard until the end of the semester.

Important Dates:  
September 4 at 11:59 PM: Deadline for Students to Drop or Add Classes  
September 25: Midterm 1, October 21: Midterm 2, November 23: Midterm 3  
December 11: Final Exam, 8 – 10 AM
Schedule for Fall 2015
Dates subject to change (with announcement) due to unforeseen circumstances.

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<td>Course intro.</td>
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Course Assessment and Grading

Your grade is composed of the following components:

**Homework (10%)**: Mastering Physics online system described on first day of class. **Homework is an indispensible part of the course!** You must devote significant time and energy to the homework to master this material. Feel free to work together with your classmates and to seek assistance from me or the course TA. Access code bundled with textbook or available at Mastering physics website [http://www.pearsonmylabandmastering.com/northamerica/masteringphysics/](http://www.pearsonmylabandmastering.com/northamerica/masteringphysics/).

**Online Quizzes (20%)**: Also administered through Mastering Physics. There is a brief quiz following each chapter (see schedule above). Once you begin a quiz, you have **60 minutes to complete** it (much more than enough time), but you may start whenever you like after the quiz becomes available. Collaboration is not permitted on quizzes.

**Midterm Exams (70%)**: There are three multiple-choice midterm exams administered at the times indicated on the schedule above. You may prepare a single standard 8½×11 inch notes sheet (both sides) for use in the exam, but no other notes or collaboration are permitted. Please bring a PARSOURCE TEST FORM F-289-PAR-L (the narrow, red ones) to each exam. No exams are dropped, but low scores may be replaced by the final (see below).

**Final Exam**: An **optional**, multiple-choice, comprehensive final is offered to give a chance to replace low midterm scores. Your final exam score will replace every midterm score that is lower. There is **no risk** to taking the final.

**Grade Scheme**: +92.5%: A+, 90.0%-92.4%: A, 87.5%-89.9%: A-, 82.5%-87.4%: B+, 80.0%-82.4%: B, 78.0%-79.9%: B-, 72.0%-77.9%: C+, 70.0%-71.9%: C, 65.0%-69.9%: C-, 60.0%-64.9%: D+, 50.0%-59.9%: D, 0.0%-49.9%: F.
Other Course Policies

**Absence policy:** Please notify me as soon as possible if any exam is missed or will be missed due to illness or other valid reason. A suitable make-up or excusal will be arranged as is appropriate for each case. Exam absences can only be excused in the case of serious illness or other emergency.

**Cheating:** Any form of cheating on any scored activity will result in, at minimum, a zero on that activity and possibly an automatic F in the course.

**Student Disability Services:** If you believe you will need accommodations for this class, it is your responsibility to contact me and Student Disability Services at [619] 594-6473. To avoid any delay in the receipt of accommodations, you should contact Student Disability Services as soon as possible. Please note that accommodations are not retroactive, and that I cannot provide accommodations based upon disability until I have received an accommodation letter from Student Disability Services. Your cooperation is appreciated.