

Instructor: Dr. Alan Grafe
Office: 167 MSB
Office hours: MTWR, 2:00-3:30, 217 MSB, or by appointment
Phone: (810) 766-6632
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Web page: <http://spruce.flint.umich.edu/~grafe>
HW page: <http://www.webassign.net/student.html>

Materials*Required:*

Physics, Cutnell and Johnson, 5th edition

WebAssign access code card

A scientific calculator

Recommended:

Study Guide for Cutnell and Johnson

Student Solutions Manual for Cutnell and Johnson

Course Description

This is a rigorous algebra-based course in college physics. Physics is the study and application of the fundamental laws of nature, and a thorough understanding of the subject is very useful in many fields, such as chemistry, biology, engineering, and medicine. Topics will include electricity, magnetism, light, special relativity, and a survey of topics in modern physics. An emphasis will be placed on developing problem-solving skills.

Prerequisites and Workload

A student beginning this course is expected to have successfully completed College Physics I and be proficient at algebra, geometry, and trigonometry. The workload for this course is generally in-line with established norms for a 4-credit class; however, it is vital for the student to have read the text before class and to diligently pursue the assigned homework, seeking to successfully complete all problems on or before the due dates.

Electronic Course Materials

Any supplemental materials will be placed on my web page. If you are attempting to use those materials from home, point your browser to <http://spruce.flint.umich.edu/~grafe>

Homework

Since problem-solving technique is so important in the study of physics, it is incumbent on the student to practice applying the physical concepts covered in lecture. To this end, homework will be assigned weekly. Homework and quizzes will be handled by the WebAssign system, which you can access by pointing a web browser to the address <http://webassign.net/student.html> The first lab period will be devoted in part to familiarizing you with the WebAssign system.

Quizzes

There will be a total of 6 in-class quizzes that will be given throughout the course of the term. You will be able to drop your lowest score. The quizzes will always be given during the first 20 minutes of a Thursday class.

Exams

All exams are closed-book, with the exception that you may bring one 3" x 5" card to the first exam, two cards to the second exam, three cards to the third exam, and four cards to the final. These cards may contain material of your choosing on one or both sides of the card.

The exams will be on the dates and times noted on the class calendars unless otherwise announced in class. Attendance to all three exams and the final is mandatory, and no makeup exams will be given. Accommodation *may* be made at the instructor's discretion for dire emergencies for which satisfactory official documentation has been provided (this does *not* include such things as opening day of deer season, getting a great deal on plane tickets to Aruba, or oversleeping!).

Grading

Your grade will be based on the total points accumulated from exams, homework, and laboratory as follows:

3 exams at 100 points each:	300 points
Homework:	200 points
Quizzes:	100 points
Laboratory:	150 points
Comprehensive final exam:	150 points

Total: 900 points

A+:	97%
A:	93%
A-:	90%
B+:	87%
B:	83%
B-:	80%
C+:	77%
C:	73%
C-:	70%
D+:	67%
D:	63%
D-:	60%
E:	below 60%

If the class average is less than 80% (720 points), the grading scale *may* be adjusted at the instructor's discretion, but the above point totals guarantee the above grades.