

PHY 221
Mechanics, Sound & Heat
Winter 2008
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Instructor: Dr. Jacobs
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Office Hours: Monday & Wednesday 1:00 to 3:00 pm, Tuesday 11:00 to noon, and Thursday 11:00 am to 1:00 pm. Other office hours by appointment. You may also contact me by email.

Required Text: Physics, Volume One (7th edition) by Cutnell & Johnson, Wiley Publishers, ISBN 978-0-471-66316-6.

Material covered: Selected topics from Chapters 1 to 17.

Laboratory

The laboratory is a required part of this course. You **must** pass the laboratory with a score of at least 60% to receive a passing grade in the course. There can be no exceptions to this requirement. If you are retaking the class then you must retake the lab, this is departmental policy. Lab starts the second week of class. Make-ups for the labs are usually not permitted. As part of the new General Education requirements you must give an oral presentation in lab. This is a required component of the PHY 221 course, so if you do not give a presentation you will not pass the class. Your TA will use a rubric to grade your presentation, however the final grade for the oral will be either a pass or a fail. You must score at least six points out of ten to pass this requirement. It is Departmental policy that the grade for the oral requirement may NOT be used for any other purpose in the lab.

Homework

It is necessary to practice physics to master the material; only completely brilliant folks can listen to a lecture and then successfully solve problems on exams. You should try to solve as many problems in the text as you have time for, and you should definitely solve the ones I specifically assign. Homework will be due every week. You will need to write out your solutions on CLEAN paper and staple the pages together BEFORE you come to class. Homework is due at the beginning of the lecture period; no late homework will be accepted because we will go over it the first few minutes of class. You will have to read your text to be able to solve the problems and answer the conceptual questions. You are encouraged to work on the homework assignments with your classmates, but the final solution you submit should be your own. Don't wait until the last minute to do your homework. Two problems from each assignment will be chosen randomly and then graded. Each homework assignment is worth 20 points and then the point total will be normalized to 160 points for the class.

Quizzes

There will be 8 quizzes on the dates listed below. The quizzes are designed to give you feedback on how well you mastered the concepts and problem solving skills covered by the homework assignments. You will have an opportunity to pinpoint where you are having difficulties before the examinations so that you can hopefully fix these misconceptions and succeed on the test. Be aware that the quizzes will cover material discussed in lecture that may not have appeared on the homework so you should be sure to review your class notes. Quizzes will be given during the last 20 minutes of class and are closed-book, but you may use your notes. Keep good notes so that you have a good resource for the quizzes;

There will be **no exceptions** made to this grading scheme. There will be several opportunities to earn extra-credit in the course that you can use to raise your grade (an important consideration especially if you are on the lower side of the cut between two letter grades).

Tutoring

The Society of Physics Students will provide some free tutoring in the Department of Physics Reading Room. The schedule of tutoring hours will be available the end of the second week of class at the following URL address: www.physics.emich.edu/sps.

Class Environment

We will maintain a professional, learning environment in the classroom at all times. Each student will be expected to be courteous to her/his classmates during lecture, during classroom discussions and during exams.

1. Students in PHY 221 usually want to know if there is a way to earn bonus points for the course. The good news is that you all already have some! Yes, you each have 15 bonus points!! The bad news is that you can lose them.

Absolutely **NO** audio devices of any sort should ever go off in the classroom! If you are a parent with a sick child at home and the baby-sitter may need to contact you, then put your cell phone or pager on vibration mode and sit in an aisle seat so you can discreetly leave the class to make your call or talk on the phone.

If a cell phone (or other audio device) goes off in class, then the entire class will lose 5 bonus points. If, unbelievably, cell phones (or other audio devices) ring more than 3 times in class, then 5 points will be taken off everyone's exam score each time a phone rings again. Turn them off folks!



2. You may **NOT** use a laptop computer during class. The only exception to this rule will be for students who bring the proper paperwork from the student access office.