

Physics 242: Course Instructions – spring 2013

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Purpose: Physics 242, *Vibrations and Waves*, is a course intended to prepare you for the study of many kinds of oscillating systems that you will encounter later in both experimental and theoretical physics. The emphasis of the course is on solving problems, and a substantial part of the course is spent on problems that will exercise the principles that govern oscillating systems. The lecture course and its associated Laboratory course, Phys242L, are very closely coupled, to the point that the separation between them may become indistinguishable.

Calendar: Class normally meets in Room 109 Workman from 9:30 am till 10:45 pm, Tuesday and Thursday. There will be three regular exams during the course. Our last day of classes is Thursday, May 2. The final exam will be given at the time and place announced by the Registrar.

Textbooks: The class notes will serve as our main textbook for the course; as a reference, I recommend the book *Waves and Vibrations in Physics, 3rd Edition*, by Iain G. Main. It is published by Cambridge University Press, 1993, ISBN 0-521-44701 1 (paperback). The textbook for the lab is *Getting Started with MATLAB*, by Rudra Pratap (optional if you have another suitable MATLAB text).

Office hours: I will have office hours Monday and Friday, 3:00-4:30 pm, and other times by appointment. However, I keep on open door policy.

Homework: Homework will be assigned nearly every class period. Assignments are due at the *beginning* of the following class period. Write the assigned problem numbers clearly at the top of the first page, and identify each problem by its assignment number, problem number, and section number. You must show all your work, so that it is easy to follow how you arrived at your solution. When a numerical or algebraic answer is required, draw a box around it. Answers must be labeled with the proper units. Homework papers which do not meet these guidelines may be rejected with no grade.

Grading: No grade of “incomplete” will be awarded for any reason. The weighting of your final grade will be

as follows :

Class Participation	5%
Homework	20%
Regular Exams	60%
Final Exam	20%

Yes, there is an extra 5% for class participation that you could use in case something goes wrong in any assignment.

POLICES.-

Permissions: Changing due day of a homework or exam day could be granted if the circumstances, in my opinion, warrant such change.

Grading: I will grade your homework and exams as soon as possible. Once I have returned them, you will have a maximum of one week to dispute your grade. There is, however, no time limit to talk to me about them.

Homework: You are encouraged to discuss homework problems with your classmates, but I expect that the work that you present to me for grading is your own.

Exams: The content of each exam may vary as I see fit, but I let you know at least a week in advance. Exams are to be taken individually. The final exam will emphasize the later parts of the course, but it will be inclusive of the whole course.

Academic Honesty: You may discuss material with each other until doomsday, and I encourage it, BUT... Anything written must be your own work. It is not permissible to give or receive answers in a way that bypasses the need to think about the homework, quizzes, or exams on your own. If you receive help from *any* source, it must be acknowledged. If your friend helps you through a particular part of a problem, *acknowledge it!* Such acknowledgment will not necessarily lead to a penalty, but its omission is a violation of this policy and can have serious consequences. If in doubt, please ask me. Violation of the letter or intent of this policy will result in serious harm to your grade, and may result in recommendation for suspension from the Institute.

Schedules: The most up-to-date information about dates and content for homeworks and exams will be at physics.nmt.edu/~clopez/Phys242/phys242.html

Acknowledgments: This course was first developed by Paul R. Krehbiel, Professor of the NMT physics department. It was further refined by Timothy H. Hankins and Barry Sabol also from NMT physics. I have taken their work, including this set of instructions, as the base for this class.