Overview
This course deals with the physics of vibrations and waves, including the harmonic oscillator, the wave equation, wave propagation, and a little optics. The ideas covered in this course form a fundamental basis for understanding an enormous range of physical phenomena and therefore are key for all physicists and engineers.

Textbook
The textbook for the course is *Vibrations and Waves* by A.P. French. I will be following the text closely and most of the homework will be drawn from it. It is thus vital that you have a copy of the text and that you read it to complement the lectures and do well in the course.

Lab component
The lab component of this course (PHYS 2300L) aims to do two things: (1) reinforce the material that we discuss in class with hands-on examples, and (2) teach you laboratory skills that will be important in all your future work as a physicist.

How to do well in this course
See my poster opposite my office. This course is not easy and you’ll need to put in a significant amount of work to succeed. Come to all classes and read the new material in the text before coming to class. After class, review the text, update your notes, and try any assignment problems on material just covered. If you don’t understand something, come see me! You should do all assignments without benefit of internet solutions; copying solutions is not learning physics! This will take more time than you’re used to from first year, but obtaining your own solutions is critical in learning the material enough to do well on the exams. Thus, don’t leave starting an assignment to the night before it’s due!

Contact information
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Office hours:
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Course website:
go to http://www.ap.smu.ca/~dclarke
then click on “Teaching, PHYS 2300”
Teaching assistant: TBA

Grading scheme
Problem sets 20% weekly
1st midterm 10% Oct 3/5
2nd midterm 10% Nov 7/9
Labs 25% MN 001
Final exam 35% date TBD

Important: an “F” on the lab component of the course automatically results in an “F” for the whole course. Thus, you must pass the lab component to pass the course.

Assignment/lab due times
Assignments are due Thursdays in class, or slipped under my office door before midnight. Labs are due in lab one week after they are performed. No credit given for late assignments or labs.

Policy on collaboration
You may discuss and even work on homework problems with your classmates. However, you must hand in your own hand-written solutions, legibly written with enough steps to convince the grader you understand what you’ve submitted. If you find you are taking more from your study group than contributing, leave the study group!