Instructor: Richard Noel Fell
E-Mail: fell@brandeis.edu, Office: Bass Abelson 311
Office Hours: By appointment. You can also email me with questions. I will try to respond promptly.

Textbooks:
Required: Physics for Scientists and Engineers, Third Edition by Randall D. Knight

Prerequisites:
The course co-requisite is Math 10b. You are expected to know differential calculus of one variable and some integral calculus. Additionally, knowledge of high school algebra and trigonometry is assumed.

Important:
At the first recitation section of the semester (see below) everyone will take a math competency exam covering material you are expected to know (see previous paragraph). Although your grade on this exam will not count toward your final course grade, your score will tell you and me whether your math background is up to par for the course. If not, then it is your responsibility to educate yourself in the math you do not know. The second book listed above is an excellent reference to strengthen any weak topics in first year calculus.

What is expected of the student:
Since this is a four credit course (three lectures per week), to do well you are expected to spend at least a minimum of 9 hours of study time per week in preparation for class (readings, homework assignments, discussion sections, preparation for exams, etc.) although in my experience, most students have to spend more time than this.

Recitation sessions:
The Monday evening recitation session will be partitioned into four, five or six one hour sections, one or two sections beginning at 6:30, 7:30 and 8:30. I will assign each class member to one of the sections. Attendance is mandatory.
The graduate teaching assistants will teach each section and will 1) usually give a quiz which
counts toward your course grade, 2) answer questions on past homework assignments, 3) do example problems and 4) answer any course related questions you have.

Quizzes:
There will be a quiz at the beginning of each recitation session and possibly some unannounced quizzes during lecture times. Note the conditional in the last phrase of the last sentence. The quizzes will be quite short, easy and test on whatever has been covered since the beginning of the semester. If you miss a quiz because you did not show up for class or recitation you will get a zero.

Homework:
Weekly homework assignments will be posted each Thursday on Latte and are due by 12:00 PM the following Thursday. Place your assignments in your folder in the physics 11a file box outside the the physics office. The folders are arranged alphabetically and are to be left in that order. The graders for the course will return the homeworks to your folders the following Monday by 12:00 PM.
You will get no credit, a score of zero, for turning homework assignments in late unless you get prior permission for tardiness. Note that if illness prevents you from doing your assignment then a doctor’s note or equivalent must be presented. Tardy work must still be submitted to pass the course.

Formatting homework assignments:
See the separate paper posted on Latte for the homework formatting rules.

Teaching Assistant office hours:
The graduate teaching assistants are ????????? and ??????????. Their office hours are ???????????????????????????.

Exams:
There will be three one hour exams and a cumulative final exam. Missing an exam without sufficient reason is cause for failing the course. In other words, you must take each exam. If you are ill (get a note from your doctor or equivalent) or otherwise legitimately indisposed, then you can take a makeup exam.
No notes, calculators, etc. are allowed during exams. The dates of the exams are listed on the course calendar.

Grade Composition:
The final grade will be determined by the following weighting:
Quizzes: 15%, Homework: 15%, Midterm Exams (3 @ 15% each): 45%, Final Exam: 25%.
Grading Scale:
If needed, final grades will be scaled to 84%, a B.

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Course Contents:
The course will cover chapters one through fourteen, Newtonian mechanics and harmonic oscillations. You are responsible for all the material in each chapter even if I do not lecture on all the chapter contents.

Schedule of topics:
I will post the weekly topics on Latte.