This course carries the Quantitative Reasoning flag. Quantitative Reasoning courses are designed to equip you with skills that are necessary for understanding the types of quantitative arguments you will regularly encounter in your adult and professional life. You should therefore expect a substantial portion of your grade to come from your use of quantitative skills to analyze real-world problems.

This course may be used to fulfill three hours of the natural science and technology (Part I or Part II) component of the university core curriculum and addresses the following four core objectives established by the Texas Higher Education Coordinating Board—communication skills, critical thinking skills, teamwork, and empirical and quantitative skills. All four objectives will be addressed through a peer instruction component, and the nature of the subject material itself.

This course makes use of the web-based Quest content delivery and homework server system maintained by the College of Natural Sciences. This homework service will require a $25 charge per student for its use, which goes toward the maintenance and operation of the resource. Please go to http://quest.cns.utexas.edu to log in to the Quest system for this class. After the 12th day of class, when you log into Quest you will be asked to pay via credit card on a secure payment site. You have the option to wait up to 30 days to pay while still continuing to use Quest for your assignments. If you are taking more than one course using Quest, you will not be charged more than $50/semester. Quest provides mandatory instructional material for this course, just as is your textbook, etc. For payment questions, email quest.fees@cns.utexas.edu.

Instructor: Prof. Greg Fiete. Office: RLM 13.316. 232-8084. fiete@physics.utexas.edu
TA: Qi Chen, RLM 7.321 (Office hours TBD). chenqi0805@gmail.com
LA: Julius Zerwick, (Office hours TBD). juliuszerwick@hotmail.com
Classes: MWF 1:00 pm-2:00 pm, PAI 2.48.
Recitation: (Time & Location to be announced)
Office hours: Wednesday 11:00 am-1:00 pm and by appointment.
Course Website: http://www.ph.utexas.edu/~fietePHY-301.html (More detailed information is provided there.)

Textbook: Physics for Engineers and Scientist, Third Edition (Norton) by Ohanian and Markert. This is a very good textbook on this foundational material in physics.
References: The site http://ocw.mit.edu/courses/physics is a helpful resource.
Prerequisite: High School physics, PHY 306, or consent of the undergraduate advisor; Math
408C, or 408K and current enrollment or credit in 408L. Students should be co-registered in PHY 101L.

**Course Requirements and Grading Policy:**

*CLASS ATTENDANCE.* Class attendance is important to reinforce topics covered in the homeworks and vice-versa. iClickers will be used in this course and points will be given for correct answers and attendance.

*Homework sets* (roughly due every Tues and Thurs at 11 pm) to emphasize the most important ideas from class. Will be assigned on Quest.

*Exams.* There will be three mid-term exams and a final exam during the regular final exam period. The dates for the in-class mid-term exams will be announced by the second week of class, and the final will be **Friday, May 9th 2014** from 2 pm to 5 pm. Students will need to present a UT ID, a driver’s license, or a passport at each exam.

The final grade will be 10% iClicker, 10% homework, 42% midterm, and 38% final. In this course +/- grades will be given as is now required by the University. Three homeworks and one mid-term exam grade will be dropped before computing the final grade.

**Material to be covered:**

We will cover chapters 1-18 of our text.

**Perspective of instructor:**

This is an exciting course to teach! This course introduces the fundamentals and basic principles of physics. Problem solving by reducing complex situations to simpler underlying principles is emphasized.

**Required University Notices and Policies**

**University of Texas Honor Code**

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

**Use of E-Mail for Official Correspondence to Students**

Email is recognized as an official mode of university correspondence; therefore, you are responsible for reading your email for university and course-related information and announcements. You are responsible to keep the university informed about changes to your e-mail address. You should check your e-mail regularly and frequently—I recommend daily, but at minimum twice a week—to stay current with university-related communications, some of which may be time-critical. You can find UT Austin’s policies and instructions for updating your e-mail address at [http://www.utexas.edu/its/policies/emailnotify.php](http://www.utexas.edu/its/policies/emailnotify.php).

**Documented Disability Statement**

If you require special accommodations, you must obtain a letter that documents your disability from the Services for Students with Disabilities area of the Division of Diversity and Community Engagement (471-6259 voice or 471-4641 TTY for users who are deaf or hard of hearing). Present the letter to me at the beginning of the semester so we can discuss the accommodations you need. No later than five
business days before an exam, you should remind me of any testing accommodations you will need. For more information, visit http://www.utexas.edu/diversity/ddce/ssd/.

Religious Holidays
By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, I will give you an opportunity to complete the missed work within a reasonable time after the absence.

Behavior Concerns Advice Line (BCAL)
If you are worried about someone who is acting differently, you may use the Behavior Concerns Advice Line to discuss by phone your concerns about another individual’s behavior. This service is provided through a partnership among the Office of the Dean of Students, the Counseling and Mental Health Center (CMHC), the Employee Assistance Program (EAP), and The University of Texas Police Department (UTPD). Call 512-232-5050 or visit http://www.utexas.edu/safety/bcal.

Emergency Evacuation Policy
Occupants of buildings on the UT Austin campus are required to evacuate and assemble outside when a fire alarm is activated or an announcement is made. Please be aware of the following policies regarding evacuation:

- Familiarize yourself with all exit doors of the classroom and the building. Remember that the nearest exit door may not be the one you used when you entered the building.
- If you require assistance to evacuate, inform me in writing during the first week of class.
- In the event of an evacuation, follow my instructions or those of class instructors.
- Do not re-enter a building unless you’re given instructions by the Austin Fire Department, the UT Austin Police Department, or the Fire Prevention Services office.