PHYS 1443: General Technical Physics I Spring 2014

Instructor(s): Dr. Alden Stradling **Office Location:** CPB 128 B

Course Website: http://bit.lv/Phys1443-Spring2014

Email Address: arstrad@uta.edu (official class business)

Office Hours: Tuesday 3:30 pm to 4:30 pm and Thursday, 1:00 pm to 2:00 pm

Section Information: Physics 1443 Section 003

Time and Place of Class Meetings: Tuesday & Thursday, 2:00 pm to 3:20 pm, SH 103

Description of Course Content: The first half of a one-year technical course. Required for many science and engineering majors, exceeds premedical requirement. The study of physical phenomena in the fields of mechanics, heat, and waves. Concurrent enrollment in MATH 1426 (per prerequisite) is not recommended if no prior background in calculus. Prerequisite: MATH 1426 or consent of instructor.

Required Textbooks and Other Course Materials:

Textbook: "Physics for Scientists and Engineers" by Giancoli (4th Ed.) <u>ISBN 978-0-13-227358-9</u> **Homework Service Enrollment Code:** <u>MasteringPhysics</u> (sold with the text or separately)

Physics Lab Manual: Sold in bookstore

i>Clicker 2 or i>ClickerGO: The <u>iOS/Android/web</u> version is much less expensive than the hardware version. Look online to save money. Feel free to use the 2-week trial of i>ClickerGO if you aren't sure you'll be staying in the class... you can always pay later.

Descriptions of major assignments and examinations: Students will be expected to 1) complete online homework assignments on a weekly basis, 2) complete three in class examinations, 3) complete the cumulative final examination, and 4) complete the associated laboratory (see below).

Attendance: Attendance and participation are strongly encouraged, but will not count towards your grade. They will influence clemency if you request special consideration. Pop quizzes will be given, and will total 20% of your grade. Students that do attend usually demonstrate greater proficiency on tests.

Other Requirements: The associated lab will require weekly lab reports (based on lab attendance/performance) and a final examination. Laboratory participation is *mandatory*, so go every week!

Grading: Homework: 10%

Class Quizzes: 20%

Tests: 30% (2 tests at 15% each)

Lab Grade: 15%

Final Exam: 25% (cumulative)

Students are expected to track their performance throughout the semester and *quickly* seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course **should expect to spend** *at least* **an additional 3 hours per class period** of their own time in reading required materials, completing assignments, preparing for exams and otherwise preparing themselves for mastery of the material.

Make-up Work: Make-up examinations are unlikely, and requests will be handled on a case by case basis. A make-up examination WILL NOT be granted without permission granted **before** the test's administration. Such permission will require a valid, documented excuse (consonant with university policy) due to *extreme* circumstances. Homework must be submitted on time for credit, but it also trains you for the tests. For your own sake, *complete it even if you cannot submit it on time*.

Exam Materials: Programmable calculators are permitted – cellphones, tablets and laptops are not. Bring writing tools – paper will be provided.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for nonattendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/ses/fao).

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate based on that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation constituting a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Academic Integrity: All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located in the back of the room (SH103), or down the hall to the left from the front of the room. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact University-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activation and use of MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: A period of five class days before the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new material as appropriate.

Tentative Course Schedule

1/14/2014 thru 2/25/2014 (13 classes): Chapters 1-8
3/4/2014 thru 4/10/2014 (9 classes): Chapters 8-13
11/14/2014 thru 12/3/2014 (4 classes): Chapters 13-15

2/27/2014: Test 1 (Chapters 1-6)
4/15/2014: Test 2 (Chapters 7-11)
5/6/2014: Final Exam (2:00 – 4:30 PM)

Other Notable Dates:

 1/20/2013: Martin Luther King Jr. Day (Mon.)
 3/28/2013: Drop Date

 1/29/2013: Census Date
 3/10-14/2013: Spring Break

As instructor, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. (Alden R. Stradling)