PHYS 1444 Section 004: General Technical Physics II

Instructor: Dr. Barry Spurlock
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Office Telephone Number: None (Physics Office: 817-272-2266)

Office Hours: Tues/Thurs, 4pm to 5pm
Meetings: TBD

Description of Course Content: The second half of a one-year technical physics course. Subject matter includes electricity and magnetism, light and optics, and modern physics, and is supplemented by laboratory experiments. Prerequisite: PHYS 1443 and MATH 2325 or 2425 (or concurrent enrollment). The course will focus on the development of the critical thinking and quantitative skills needed to solve problems, while the lab will develop empirical skill as well as communication and teamwork.

This course satisfies the University of Texas at Arlington core curriculum requirement in life and physical sciences.

Required Textbooks and Other Course Materials:
Textbook: “Physics for Scientists and Engineers” by Giancoli (4th Ed.)
Homework Service Enrollment: https://quest.cns.utexas.edu/
Physics Lab Manual: Sold in bookstore

Attendance: Attendance is expected, but will not count towards your grade. You are HIGHLY encouraged to attend class as students that do demonstrate a 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 a necessity. A significant portion of the lab grade will be based on the completion of a group project that will require effort both in class and out.

Grading: Homework 15%
Tests 60% (3 tests at 20% each)
Lab Grade 25%

Students are expected to keep track of their performance throughout the semester and 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 week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

Make-up Exams: Make-up examinations will be handled on a case by case basis. Do not expect a make-up examination will be granted unless you have valid excuse (as per university policy)

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 non-attendance. 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/finaid).

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 on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of 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.

**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 activating and using 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.

**Other Dates of Note:**

**Signature Assignment:** Report writing for one of the lab experiments

Instructions: The signature assignment will be one of the labs, for which you will have to prepare a report. This assignment will require some library research, some laboratory work and measurements. Your results will be reported in a term paper of at least 8 pages (double spaced 12pt including graphs and figures).

Your lab TA will inform you which lab your signature assignment will be depending on the lab group you are in. A detailed report-writing methodology and the grading rubrics will be provided ahead of the signature assignment.