

Physics 1444-002 Fall 2016

Instructor: *Dr. Suman Satyal*

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Faculty Profile: <http://www.uta.edu/physics/labs/suman.html>

Section Info: Physics 1444-002, MWF: 10:00 AM – 10:50 AM, FA 258

Description of Course Content: The second half of a one-year technical course. Subject matter includes *Electric Charge and Field, Gauss's Law, Electric Potential, Capacitance, Electric Current, DC Circuits, Magnetism and Magnetic Field, Electromagnetic Induction, Light, Interference and Diffraction, and Modern Physics*. **Prerequisite:** *PHYS 1443* or equivalent, and Math 2485 or concurrent enrollment.

Required Textbooks and Other Course Materials:

Textbook: Physics for Scientists and Engineers, 4th edition, Volume II by Giancoli (Mastering physics code NOT required)

Homework Service Enrollment: <https://quest.cns.utexas.edu/>

Physics Lab Manual: "Electricity and Light" is sold in bookstore.

Labs Start on: Week of Jan 25

Attendance: Attendance is expected, but will not count towards your grade. It has been found that the students who attend all the lectures do better overall than students who don't. Lab attendance is compulsory. There are lab reports due every week (for most of the labs) and there will be a final exam for the lab section as well.

Grading: Homework 20%
Tests 60% (4 tests at 15% each)
Lab Grade 15%
Quizzes 5%

Scale: A: 90.00-100%
B: 80.00-89.99%
C: 70.00-79.99%
D: 60.00-69.99%

Course Schedule and Exam Dates:

08-29-2016 thru 09-21-2016: Chapters 21 - 24

Electric Charge/Field, Gauss Law, Potential, Capacitance

Sep 23rd: Test I

09-26-2016 thru 10-19-2016: Chapters 25 - 29

Electric current, DC Circuits, Magnetism, EM Induction

Oct 21st: Test II

10-24-2016 thru 11-11-2016: Chapters 30,31,32,34

AC Circuits, EM Waves, Light, Interference

Nov 14th: Test III

11-16-2016 thru 12-02-2016: Chapters 35,36,44

Diffraction/Polarization, Relativity, Astrophysics & Cosmology

Dec 5th: Test IV

As the instructor of this course, I reserve the right to change this schedule when necessary.

Make-up Exams: Make-up examinations will be handled on a case by case basis, and will only be allowed if you have a valid excuse as per university policy.

Homework:

Problems will be assigned and graded on the Web. We will be using the UT homework system, called Quest maintained by the College of Natural Sciences at The University of Texas at Austin. 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. At some point during the second or third week, 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 15 days to pay while 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/quarter. Quest provides mandatory instructional material for this course, similar to a textbook. For payment questions, email quest.billing@cns.utexas.edu

Each student must obtain or can reuse an existing UT EID and password and also sign up for the course itself using the Course Unique Number **1444Fall2016**.

1. To Get a UT login account:

- Go to <https://quest.cns.utexas.edu/student>
- Select the link "Get Started"
- Select the link "I need a UT EID"
- Select the link "Get a UT EID"
- Follow the instructions to get a UT EID. Once you get this ID, write it down in a safe place for you to keep.

2. To register as a student in this course:

- Go back to <https://quest.cns.utexas.edu/student> and again click "Get Started". Then type in your new login information.
- Click on "Enroll in a new course".
- Enter your class ID # **1444Fall2016**
- Click "Request Enrollment" on the verification page. You may now log out. Once you have requested enrollment I will need to "accept" you into the class. After this has been done, you will officially be in the class and can download your homework.

3. To download your homework:

- Go to <https://quest.cns.utexas.edu/student> . Click Get Started and enter your login information.
- Click on your course link.
- Click on appropriate homework title "e.g., Unit 16 - Part I" to open it.
- Click the print icon in the smaller window to print your homework assignment.

Physics Clinic: Please make an optimum use of the physics clinic (SH007). Tutors are available there to help you with your physics questions as well as with your homework problems.

Drop Policy: Students who wish to drop or swap this class must do it themselves from MyMav, but consult with the instructor to make sure that no grades is reported. If you are dropped for non-payment of tuition fee, you may secure and enrollment loan from Bursar's office.

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 Dishonesty:

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts."

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>.

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. For those in the back of the room this will be to exit through the back doors and through the exits. For those in the front of the class, the nearest exit is to leave through the front door of the class and out the front entrance of Science Hall. 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.