

Physics 1442 Section 001
Summer 2011, Science Hall-Room 105
Time: Monday to Thursday, 10:30 a.m. - 12:30 p.m.
Text Book: "PHYSICS Principles with Applications" by Giancoli, 6th Edition Volume II

Instructor: Prof. M. N. Huda

Office Hours:

CPB, Room 339

3:30 p.m. - 4:30 p.m. Monday and Wednesday, or by appointment.

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Course Prerequisites: Familiarity with high-school algebra, trigonometry etc. and PHYS1441.

Course Contents: PHYS 1442 is an introductory physics course. Subject matter includes electricity and magnetism (chapters 16 to 21), electro-magnetic wave motion (chapter 22), optics (chapter 23 and parts of 24-25) and some introductory modern physics topics (selected sections from chapters 26 to 33). There is a companion lab course which is to be taken concurrently.

Student Learning Outcomes

Students will:

1. Know basic physics and have a thorough knowledge and comprehension of the laws of electricity and magnetism.
2. Be able to answer qualitative and quantitative problems in classical electromagnetism and related topics.
3. Develop analytical skills that can be applied to a variety of situations. These skills will include the following:
 - (a) Presentation skills. Students will be able to express in writing their understanding of core physical principles, the results of experiments, and their analysis of physical problems.
 - (b) Laboratory skills. Students will be able to set up an experiment, collect and analyze data, interpret their result, and draw meaningful conclusions from the experiment.
 - (c) Problem-solving skills. Students will be able to integrate their knowledge with critical thinking skills in order to become problem solvers. They will be able to identify the essential aspects of a problem and formulate a strategy for solving the problem. They will be able to apply appropriate methods to arrive at a solution, interpret their result.
4. Be able to apply physics knowledge to analyze new situations.
5. Be prepared to study other subjects that require on a prior knowledge of physics.

Exams:

Two exams will be given during the regular class period and a final exam (A total of three exams):

1st Exam: 07/21/11

2nd Exam: 08/01/11

Final Exam: Monday, August 15, 10:30 p.m. to 12:30 p.m.

Final exam will be of the same weight as the other two in-class exams, and will not be comprehensive, i.e., it will cover only the part that has not been included in the previous exam.

Students must take the exams in class on the days listed. **A missed exam cannot be made up unless a request was made to an instructor before the scheduled exam.** A makeup will be granted only in cases of documented illness, family emergency, or UTA athletic competition out of town.

Exam format and rules:

All the exams will be in multiple choice formats. In each exam 10 questions are required to be answered out of a total of 13 questions. Exams will be closed book. You may not use notes or other aids. Students should not talk or communicate in any way with each other during exams. You must enter your name and 4 last digits of your ID number on the exam sheet. You must also record the section unique number and provide your signature. You may be asked to show your ID.

Homework:

Average of all the homework grades in this course has the same weight as each of the regular exam. Problems will be assigned and graded on the Web. We will be using the UT homework system, called Quest.

We will be using the improved version of the UT homework system, called Quest. 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 **07122011** (**Also cross check with the instructor's name**).

1. To Get a UT login account:

- a. Go to <https://quest.cns.utexas.edu/student>
- b. Select the link "Get Started"
- c. Select the link "I need a UT EID"
- d. Select the link "Get a UT EID"
- e. 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:

- a. Go back to <https://quest.cns.utexas.edu/student> and again click "Get Started". Then type in your new login information.
- b. Click on "Enroll in a new course".
- c. Enter your class ID # 07122011. (Instructors name should be checked to avoid accidental enrollment in other classes).
- d. 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

- a. Go to <https://quest.cns.utexas.edu/student> . Click Get Started and enter your login information.
- b. Click on your course link.
- c. Click on HW 1 to access your first homework.
- d. Click the print icon in the smaller window to print your homework assignment.

4. Homework collection

Submit your homework solutions on the Web through the Homework Service. The Due Date and cut-off time are on the homework.

Solutions: Solutions to problems are available after the cut-off time on the Web.

Records: A grade report for each homework is available on the Web after the cut-off time.

Bookmark these URLs:

UT EID Registration, Passwords, Problems: https://idmanager.its.utexas.edu/eid_self_help/
Quest Student Login (Univ. of Texas): <https://quest.cns.utexas.edu/student/main>
UT Help Desk email request form: <http://www.utexas.edu/its/help/forms/mailform.html>

Grading:

No grades will be dropped. No special credit will be allowed.

Make-up tests will be allowed only if prior notification is given and the absence is excused. Letter grades will be assigned using the following guideline:

A: 90- 100

B: 80- 90

C: 70- 80

D: 60- 70

F: 0- 60

X Arrangement at end of semester

P Arrangement at beginning of semester

W Drop by August 2

Note: If you fail in Lab, you fail in the whole course.

Total grading: 100% = Exam1 (20%) + Exam2 (20%) + Final (20%) + HW (20%) + Lab (15%) + Attendance (5%)

Study Suggestions:

It is highly recommended that you read the material to be covered in class before coming to class. Start working on your homework as soon as it is available. You get multiple tries for a missed question in Quest. However, each successive attempt will decrease your credit further for that problem. You can get help if you have trouble understanding the material. Please see the following section. The importance of doing the homework assignments (*and understanding them*) cannot be overemphasized. Exam problems will resemble the homework problems. It is okay to discuss the homework with other students and to work on it with them. However, it will be **most useful** to you if you always generate your own answers.

Getting Help:

Attend regularly Physics Clinic and ask questions. TAs from Physics Clinic are available regularly for coaching in Science Hall. Check the bulletin board outside Room 108 SH for listing of TA's coaching schedules.

See the Instructor during his office hours. Office hours are **3:30 p.m.- 4:30 p.m., Monday and Wednesday**. You can see the Instructor outside scheduled office hours. To do this, please make an appointment first via email.

Attendance:

Attendance is required. Absences should be discussed with the instructor - preferably, before they occur.

Grade Replacement:

If you are retaking this course in order to replace a previous grade, you must complete the necessary form by census day (July 18). The necessary forms are located at the Bursar's Office in Davis Hall. If you do not complete the forms by census day, the University will not honor the replacement.

Drops:

Students wishing to drop this class or resign from the university during the semester must do it themselves, but should consult the instructor in advance to determine the course grade to be reported.

Drop for Non-Payment of Tuition:

If you are dropped from this class for non-payment of tuition, you may secure an Enrollment Loan through the Bursar's Office. You may not continue to attend class until your Enrollment Loan has been applied to outstanding tuition fees.

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."

Disabilities:

The Univ. of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public law 93112-The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act - (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. As a faculty member, I am required by law to provide "**reasonable accommodation**" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with **informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.**

Student Support Services Available:

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.