

**Physics 1442 Section 001**  
**Summer 2014, SH-Room 121**  
**Time: Monday to Thursday, 10:30 a.m. - 12:30 p.m.**  
**Text Book: "PHYSICS Principles with Applications" by Giancoli, 7th Edition Volume II**

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**Instructor: Prof. M. N. Huda**

Office Hours:

CPB, Room 339

12:30 p.m. - 1:30 p.m. Tuesday, Wednesday and Thursday, or by appointment.

Tel: (817) 272-1097

Fax (817) 272-3637

E-mail: [huda@uta.edu](mailto:huda@uta.edu)

**Important:** All email communications must be done from your UTA registered email ([\\*\\*\\*@mavs.uta.edu](mailto:***@mavs.uta.edu)). I'll send course related emails only to your UTA emails.

**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). *We'll try to cover as much as possible in this summer five weeks.* There is a companion lab course which is to be taken concurrently. Lab will start from July 9, 2014.

**Expected 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):

1<sup>st</sup> Exam: 07/16/14

2<sup>nd</sup> Exam: 07/29/14

**Final Exam: Monday, August 11, 10:30 p.m. to 12:30 p.m.**

Final exam will be the comprehensive exam. The first two are not comprehensive, i.e., these two will cover only the part that has not been included in the previous exam. Lowest of the first two exam will be dropped.

Students must take the exams in class on the days listed. **There will be no make-up exam.** Missing an exam will need pre-approval from the instructor. **If you miss any exam without pre-approval from the instructor, you'll get an F in the course.**

**Exam format and rules:**

All the exams will be divided into multiple choice and free response formats. 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 the final exam. Problems will be assigned and graded on the Web. We will be using the *MasteringPhysics* Homework system. Homework will be assigned two or more times in a week. Due to the nature of the short duration of the semester, some of the homework problems may be assigned in advanced before they are discussed in the class. One lowest grade will be dropped from the Homework those are assigned during the period of the course.

Each student must obtain or use an existing *MasteringPhysics* access code and/or password, and sign up for the course using the Course Unique Number HUDA339 (Please cross check with the instructor's name).

**Grading:**

Letter grades will be assigned using the following guideline:

A: 90- 100

B: 75- 90

C: 60- 75

D: 50- 60

F: 0- 50

W: Drop by July 29<sup>th</sup>

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

**Total grading: 100% = Exam1 (15%) + Exam2 (15%) + Final (20%) + HW (20%) + Lab (15%) + Attendance (5%)+ Quizzes (5%) + Extra credit (5%+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 may 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.

See the Instructor during his office hours. 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. 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.

**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.**

**Academic Integrity:** 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.*

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. 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](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online 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 prior to 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 concepts as appropriate.

**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. 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.