

## COURSE SYLLABUS Physics 2401-001, Spring, 2010

### Office Hours

Dr. Glab MWF 11 am - noon, TTh noon - 1 pm, F 2 pm – 3 pm, Science 26,  
742-3776  
e-mail: [wallace.glab@ttu.edu](mailto:wallace.glab@ttu.edu)  
Web site: [http://www.phys.ttu.edu/~gglab/2401\\_001\\_s10.html](http://www.phys.ttu.edu/~gglab/2401_001_s10.html)

### Textbook

*Fundamentals of Physics*, Halliday, Resnick and Walker, 8<sup>th</sup> edition (Ch. 21-36), with WileyPlus online homework access. *Laboratory Manual for Physics 2401*.

**Lab:** You should be registered in a lab section.

This course satisfies the Natural Science core curriculum requirement. The objective of the study of the natural sciences component of a core curriculum is to enable the student to understand, construct, and evaluate relationships in the natural sciences, and to enable the student to understand the bases for building and testing theories. The natural sciences investigate the phenomena of the physical world.

**Course purpose:** Students graduating from Texas Tech University should be able to explain some of the major concepts in the natural sciences and demonstrate an understanding of scientific approaches to problem solving, including ethics.

| Learning Outcome  | Assessment   |
|---|--|
| Demonstrate a basic understanding of optics, E&M fields, and simple circuits. | Beginning of the semester pretest and an end of the semester posttest. |
| Develop facility with optical and electrical measurements.                    | Perform laboratory experiments.  |
| Verify the connection between theory and experiment.                          | Technical writeup and analysis of laboratory exercises.                |

### Grades

Lab 10%, Online homework 10%, three examinations 20% each, COMPREHENSIVE final examination 40%. If your low exam score is on one of the three exams, that score will be dropped. If the final is your low score, it will only count 20%.

**Likely grade scale:** 100-A-92-B-80-C-70-D-60-F-0

**Examinations:** They cover fundamental concepts, problems, and examples similar to those from **class**, the **lecture demonstrations**, and **homework**. The exams are in the evenings and scheduled for Thursdays, **2/18, 3/25, and 4/22**, 7:00 pm – 9:00 pm. The examinations will be multiple choice, and you will need to bring a 5 answer scantron for each exam. The examinations are closed book. You may bring a 3x5 formula card with up to 20 formulas of your choice to each of the three examinations and up to 4 cards for the final. **Final exam date: Saturday, 5/8**, 4:30 pm – 7:00 pm.

**Homework:** Homework problems are assigned and graded on the web through the commercial site at **www.wileyplus.com**. Once you are registered at that website you will be able to self-register for our section and download and work on the assignments. You will be able to retrieve the answers and solutions after the due date. Pay attention to the instructions on the homework website about how the homework is scored. In order to register in our section you need the URL <http://edugen.wiley.com/edugen/class/cls155167/>. This website is

not at TTU and you should give yourself plenty of time to submit answers. Sometimes the network can be slow or down. Make sure you are signed up for the correct section.

The value of the assigned homework problems is that they are the basis for some of the problems on your exams. Doing well on the homework is crucial to your success in the course. The single best indicator of success in the course is success with the homework. We've done the experimental study, you must do the homework in order to do well in the course. Do not let the small percentage weight delude you into thinking these homework problems are in some way optional. They are the single best factor in determining how you do in the course.

Homework help will be given during the recitation time of the lab section, or in my office, but very little in class.

Take notes in class, recognize the concepts behind the lecture demonstrations and examples worked in class, and study the basic physical principles. Take a look at any new chapters before class. Pay attention and ask questions. **Attend all lectures** unless you have an emergency. I will take note of your class attendance. **Class participation is expected**, and will be noted as a factor in final letter grade decisions for borderline cases.

**No make-up examinations** will be given. In case of a serious emergency, please get in touch with the instructor to discuss how the grade will be determined.

**Important Notes:**

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office at 335 West Hall or 806-742-2405.

The faculty is strongly committed to upholding standards of academic integrity. These standards, at the minimum, require that students **never** present the work of others as their own.