

## SYLLABUS PHYS 2401-001: PRINCIPLES OF PHYSICS II (Dr. Huang), Spring 2008

<b>Time/Place:</b>	MWF 12:00 PM - 12:50 PM / Science Building, Room 7.	
<b>Instructor:</b>	Prof. J. Huang (Phone: 742-4780, Email: juyang.huang@ttu.edu)	
<b>Office hours:</b>	MWF 11:00 AM - 11:50 AM, and by appointment, Science Building, Room. 35	
<b>Textbook:</b>	Physics for Scientists and Engineers, 7 <sup>th</sup> Edition, by R.A. Serway and J. W. Jewett. Chapters 23-38 (some materials omitted)	
<b>Grading:</b>	Lab grade	10%
	4 exams (drop the lowest one)	50%
	Final	30%
	Homework	10%
	Total:	100%

**Grade Scale:** 100-A-86-B-74-C-58-D-45-F-0.

**Learning Outcomes:** Students should be able to state and understand physical concepts in electromagnetism and optics, and be able to apply these principles to solving calculus-based problems, both familiar and unfamiliar, in these areas of physics.

**Outcome assessment:** The expected course outcomes will be assessed through graded online homework, labs, exams, as well as in-class discussion. The exams will provide a mixture of relatively familiar and unfamiliar problems, which will test the students' abilities to apply reasoning based on the conceptual aspects of the material to their solution.

**Homework:** There will be 5 online homework assignments. Variations of some of the assigned problems will be selected for the examinations and final. You need to submit the homework online before due days. The homework will be graded and detailed solutions will be provided online. *There will be no makeup homework.* Doing homework is important for you to practice the problem solving skills in physics and to check whether or not you really understand the important concepts. Doing homework on your own is the most effective way to improve your course grade, but group work is not strongly discouraged.

**Conceptual Questions:** Conceptual questions for each chapter will be posted on our class website. The answers usually can be found either in my lecture notes or in the textbook. You should work on these questions while you review the lectures, before doing your homework. 15% of the problems in exams will be these conceptual questions.

**Exams:** There will be 4 in-class 50-minute exams, and a comprehensive final (see class Calendar). The exams cover fundamental concepts and quantitative problems, related to the homework and lectures. The exams are closed book. You must bring a calculator and a scantron sheet to the examinations, and an optional single 3x5 equation card. *No make-up examinations will be given. In the case of a serious emergency, please see the instructor to discuss how the final grade will be determined.*

**Class Website:** (<http://www.phys.ttu.edu/~huang24/Teaching/Phys2401>): It contains a lot of useful information, such as my entire lecture notes, conceptual questions, and sample exams.

**VERY IMPORTANT:** Experience shows that you should **work about 10 hours on this course outside of class every week in studying your notes and doing the homework.** Failure to do so will almost surely result in a grade of **D** or **F**. This is the most important recommendation we make to you. Take notes in class, pay attention, and participate by asking and answering questions. Take a look at the new chapters before they are covered. See your instructor during his office hours for questions.

**Disability:** 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.

**Academic dishonesty** will not be tolerated and will be treated according to the Student Handbook rules.