

Physics 10154: General Physics I Syllabus

Important Info

Instructor Name: Dr. Hana Dobrovolny

Semester/Year: Fall 2012

Class location: SWR 357

Class Meeting times: MWF 11:00-11:50

Office: SWR 320

Office Hours: MWF 1:00-2:00, TR 10:00-11:00, or by appointment

E-mail: h.dobrovolny@tcu.edu

Final Exam: Friday, December 14, 11:30-2:00

Textbooks: "College Physics, 9th edition" by Serway and Vuille

Course outline

Course description: Three hours lecture and one 2-hour laboratory per week selected to reinforce the concepts discussed in lecture. Prerequisites: High school algebra and trigonometry or MATH 10054 or approval of instructor. Part one of a two-semester survey of general physics recommended for students in the life sciences and premedical program. Topics covered include mechanics of solids and fluids, thermodynamics, sound and wave motion. Emphasis will be given to the application of these concepts to problems in the life and health sciences.

Objectives: The main objective of this course is not to teach you physics, but to teach you how to assess, analyze, and solve problems. Along the way, you should learn some physics. In this course, it is more important to learn and understand the concepts underlying any equations and how they are used than to learn the equations themselves, so don't just memorize and regurgitate material from the textbook or lecture.

Grading

Course grades are assigned on a scale as follows:

- A: 90.0-100
- B: 80.0-89.9
- C: 70.0-79.9
- D: 60.0-69.9
- F: 0-59.9

The different components of the course are weighted as follows:

- Lab: 20%
- Attendance/in-class problems: 5%
- Homework: 15%
- Exams: 30% (15% each)
- Final: 30%

Lab: Lab instructions will be distributed via the Internet. Further information will be provided in your Laboratory Syllabi. Lab is an integral part of the course and the lab grade will be determined as an average of all the lab grades but one, with the lowest grade dropped. All students must complete at least 11 experiments. If a student completes less than 11 experiments, the lab points will still count toward the average course grade, but the letter grade will be reduced by one letter for each missing lab (more details - in the Laboratory Syllabi.).

Attendance/in-class problem: The first five minutes of each class will be spent solving a problem based on the previous class lecture. You will work in pairs (different pairs each class) and will jointly submit a written solution during those five minutes. I will look over your solutions, but they will not be graded — I will be using them as a guide to make sure the class as a whole understands the lectures. Your grade will be determined not by whether you got the correct answer, but on how many in-class problems you turn in, i.e. if you turn in 80% of the in-class problems, you will get an 80% attendance grade. If you submit a problem without attempting a solution, I reserve the right to not count that problem towards your attendance grade.

Homework: There will be weekly assignments to be turned by the end of class on Wednesdays. You may work together on homework, but each student must write and submit their own assignment. Simply copying someone else's solution will be considered cheating. Any student suspected of copying solutions will be given one warning; any further incidents of copying will be given a zero grade. Exam questions are similar to homework questions, so use the homework as an opportunity practice problem solving.

Exams: There will be two in-class exams: one on Monday, October 1, and one on Monday, November 5. In the event of an unavoidable and documented medical or legal reason for missing an exam, I will consider the issue on an individual basis.

Other important stuff

Disabilities Statement: Texas Christian University complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 regarding students with disabilities. Eligible students seeking accommodations should contact the Coordinator of Student Disabilities Services in the Center for Academic Services located in Sadler Hall, 1010. Accommodations are not retroactive, therefore, students should contact the Coordinator as soon as possible in the term for which they are seeking accommodations. Further information can be obtained from the Center for Academic Services, TCU Box 297710, Fort Worth, TX 76129, or at (817) 257-6567. Adequate time must be allowed to arrange accommodations and accommodations are not retroactive; therefore, students should contact the Coordinator as soon as possible in the academic term for which they are seeking accommodations. Each eligible student is responsible for presenting relevant, verifiable, professional documentation and/or assessment reports to the Coordinator. Guidelines for documentation may be found at http://www.acs.tcu.edu/disability_documentation.asp. Students with emergency medical information or needing special arrangements in case a building must be evacuated should discuss this information with their instructor/professor as soon as possible.

Academic Misconduct: Academic Misconduct (Sec. 3.4 from the Student Handbook) Any act that violates the academic integrity of the institution is considered academic misconduct. The procedures used to resolve suspected acts of academic misconduct are available in the offices of Academic Deans and the Office of Campus Life and are listed in detail in the Undergraduate Catalog (Student Policies; Academic Conduct Policy Details; http://www.catalog.tcu.edu/current_year/undergraduate/).

Netiquette: All members of the class are expected to follow rules of common courtesy in all email messages and chats. If I deem any of them to be inappropriate or offensive, I will forward the message to the Chair of the department and the online administrators and appropriate action will be taken, not excluding expulsion from the course. The same rules apply online as they do in person. Be respectful of other students. top