

PHYS1500, GENERAL PHYSICS I

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Office hours: MTTh 2-4; schedule an appointment with me if these times do not work for you.

Text: *College Physics, A Strategic Approach*; 2nd edition by Knight, Jones, and Field. We will cover sections in Chs. 1-14. You will only need the book; **I will not require Mastering Physics etc.** (Note: this book comes in 3 forms... vol 1 covers Chs 1-16, vol 2 covers Chs 17-30, and “plain” covers 1-30; PHYS1510 typically covers sections in Chs 17-30 and possibly some of Chs 15,16). You will need the book before your 1st lab on Aug 21/22.

Prerequisites: I expect you to know and use basic arithmetic, algebra, and trigonometry; see Appendix A of the textbook. Previous exposure to physics/science may be useful but is not necessary.

Course Objectives: The goal of this course is for students to gain an understanding of aspects of the world related to motion, conservation laws, and properties of matter. The emphasis will be on problem solving. In essence: how to take a physical situation and develop a mathematical model of that system from which specific predictions can be made.

Classes: Parker Hall 307, TTh 8:00-9:15. Classes are for reinforcing and clarifying the fundamental ideas of the course with examples and demonstrations. They are not for *introducing* ideas.

Reading: Reading is a crucial part of this course. The material is too difficult to learn by just listening to lecture. You should allocate roughly 45 minutes for each assignment to read the night before each class. The reading assignments are posted in the Canvas calendar.

Grading: The final will count for 25% of your grade. The 3 midterms together count as 50%. The lab is worth 10%. The total of the weekly quizzes are worth 15%.

Grade Scale: 90-A, 80-B, 70-C, 60-D. Anything less than 60.0 is F.

Required Equipment: Calculators for tests and labs; course book for labs. We will **not** use clickers.

Attendance: You are responsible for all info/announcements delivered in class.

Canvas: Some class info will be posted through Canvas: announcements, grade info, schedule, etc. Info about labs, homework, and extra class info is posted at the “Class” link off my homepage. *You are responsible for this information.*

Homework: 15 problems given each week. You should work them on your own, without help from friends or solutions manuals. The weekly quiz problem will be from the homework. All test *problems* will be from the book but may be slightly modified, about ½ will be from homework.

Lab & Recitation: All lab/recitations are on Tues/Wed. The session will start immediately with a quiz. The quiz will end at 15 minutes after the start of lab; if you are 10 minutes late, then you will have 5 minutes to take the quiz. Your lowest quiz score will be dropped. There are no make-up quizzes. This will be followed by 30 minute problem solving. The first lab/recitation is Aug 21/22 and is mandatory (absence = dropped). After the problem solving will be 2 hours of lab. You *will be* expected to know what the lab is about before your lab session. Your lowest lab grade will be dropped. If you miss lab for a valid reason (see Tiger Cub), you must give your lab instructor the excuse within 1 week of the absence. If you know ahead of time that you’re going to miss lab, contact me and I will try to switch you to a different day/time. Number of substitute quizzes = number of valid absences – 1 (your substitute quiz grade is your average quiz grade); Number of make-up labs = number of valid absences – 1

Lab Equipment Policy: You must bring your book, a calculator, and the lab write up to every lab. Your lab score that week will be reduced by 10 points for each item you do not bring to lab.

Midterm tests: There will be 3 tests in class. Go to Canvas or "Class" page to see the schedule.

Test/quiz protocol: You supply the writing device and a calculator; the calculator can **not** communicate (wifi/bluetooth/etc) and is not graphing. Violation of calculator policy will be considered cheating and will be reported to the Academic Honesty Committee.

Missed midterm: A missed test without a valid excuse will count as 0 points. If you miss a test for a valid reason (see Tiger Cub), you must contact me *within 2 days* and submit your excuse *within 1 week* to have it marked as a valid absence. It must be possible for me to check your excuse (legible signatures, phone numbers, etc). Your test grade will be: (class average of that test) X (your grade on final)/(class average on final).

Regrade policy: You must see me within one week of the return of the test if the total score on the test doesn't accurately reflect how well you did. I will regrade an individual problem if you did it correctly but it was marked wrong. I do not regrade individual problems for partial credit; however, I will happily regrade your whole test if you think your total score is too low.

Comprehensive Final Exam: Parker Hall 307 on Tues. Dec 4 8:00 am-10:30 am.

Test philosophy: The goals of the PHYS1500 sequence are to teach you some physics and an appreciation of the *methods* utilized in a highly successful area of human endeavor. The tests are purposely constructed in a way that you cannot make an A or B by memorization of the steps needed to solve problems. Problems will be taken from homework (approx. 1/2) and the rest from the textbook.

Student Discipline: You should be familiar with the Oath of Honor (Tiger Cub pg 15), the Policy on Classroom Behavior (Tiger Cub pg 66) and the Code of Student Discipline (Tiger Cub pg 68). I will be strictly following these policies because the class is large (approx 240).

Contingency Plans: If normal class and/or lab activities are disrupted due to illness, emergency or crisis situation, the syllabus and other course plans/assignments may be modified to allow completion of the course. If this occurs, an addendum to the syllabus and assignments will replace the original materials.

Trouble with the Class:

- (1) If you are having trouble with this class, you should see me before the final. Unless there was a mistake in grade keeping, there is nothing you can "do" for your grade after the final.
- (2) You can come to me if you are having trouble dealing with your lab instructor and I can act as mediator or determine the appropriate action.
- (3) If you are having trouble with *my* style in class, tests, etc, come see me. Chain of command: me---my dept. head (T.B.D.)---my Int. Dean (C. Savrda)/your dean---Int. Provost Boosinger