

General Physics I

PHYSICS 101.001

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Office Hours
MTWR 02:00 - 04:00 PM

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Markworth's [Home Page](#)
Summer II, 2010
Class Meets: 10:15 AM – 12:10 PM M-R
Science 334

[Hot Links](#)

- Purpose** This is a survey course which will familiarize the student with concepts of waves, sound, light, and mechanics. The major aim will be to give each student an appreciation and understanding of the physical universe. A conceptual rather than a mathematical point of view is emphasized.
- Materials** The text is [Conceptual Physics](#), eleventh edition by Paul G. Hewitt (ISBN 0-321-56809-5). The readings indicated in the Course Outline (below) correspond to chapters from this text and should be read prior to discussion of the material in class. PHY 101L, the Physics Laboratory is a corequisite and a new edition of the lab manual is available in the bookstore. You will also need a clicker (personal response system device), which we use in both the lecture and lab. The clickers are available in the BPSC bookstore only.
- EMAIL** The course is fully developed in [Blackboard](#). I will use the email system here since it is a closed email facility. All course business should be directed through Blackboard.
- Exams** There will be four major exams, each covering a limited amount of lecture and text material. The dates of these exams are listed in the course outline on the next page. Each student must provide a SCANTRON form number 882-ES in order to take each exam. The last exam will **not** be comprehensive. No make-up exams will be given except by EXCUSED absence. The last exam will contain special sections devoted to questions pertaining to the lab. See the lab syllabus for details.
- Homework** Students may improve exam score in two ways. Review questions will be assigned for each section of the course. Exam scores can be improved up to 10% through these assignments. Secondly, attendance will be taken daily, which can earn a total of five additional percentage points per exam.
- Participation** You must bring your clicker to class every day. Attendance will be taken using the clicker on most days during the first 60 seconds of class and throughout the class time. To make sure that you are going to arrive to class on time you can set your watch here: <http://www.time.gov/>. During class, we will engage in discussions and occasional activities using clicker technology (Turning Point XR). Participation in these activities will form part of your final grade. You cannot earn 'class participation' points if you don't have a clicker. Do not let anyone else use your clicker. If you are observed using two clickers you will receive no credit for the 'In-Class Participation Grade' portion of your final grade. These devices are used to allow you to show your participation in the class. Therefore if you leave class after answering a clicker question it will result in a zero for that participation grade. If you are absent, late for class, or forget your clicker then you will get a zero for the participation grade for that day - but those days can be part of the clicker grades that are dropped.

Policies

For the benefit of your fellow students and your instructor, you are expected to practice common courtesy with regard to all course interactions. For example:

- Be considerate toward your classmates and instructor and arrive to class on time.
- Do not leave class early and do not rustle papers in preparation to leave before class is dismissed without speaking with your instructor first.
- Avoid classroom distractions. Be attentive in class: stay awake, do not read newspapers, etc.
- If you are late to class or must leave early please inform your instructor in advance (enter or leave quietly, don't walk across the front of the classroom (use the side aisles) and don't walk in front of the projector).

Cell phones, pagers and other communication devices must be turned off during class. These can be classroom distractions. Using one of these devices during class will result in a zero for the corresponding participation grade.

Grading

Each major exam will be graded on a 100-point scale. No grade curving is done on any grade in this course. The lecture and lab grades will be combined and the **same grade** will be recorded for both lecture and lab. All exams (including the final) are weighted equally, and the lecture portion of the course accounts for 75% of the total grade. Fifty percent of the lab grade comes from the extra questions contained in the last exam.

$$\begin{aligned}\text{Course Average} &= 0.65 \times (\text{Exam Average}) \\ &+ 0.05 \times (\text{In-Class Participation Grade}) \\ &+ 0.05 \times (\text{Review Quizzes}) \\ &+ 0.25 \times (\text{Lab Average})\end{aligned}$$

A 90 – 100 B 80 - 89 C 70 – 79 D 60 – 69 F < 60

Academic Integrity

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class (homework, clicker, exams, lecture or lab); (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3)

incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at
http://www.sfasu.edu/policies/academic_integrity.asp

Penalties may include no credit or failure in the course.

Withheld Grades

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

Students with Disabilities

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to <http://www.sfasu.edu/disabilityservices/>.

F-1 Visa Holders

There are important federal regulations pertaining to distance education activity for F-1 Visa holders. All students with an F-1 Visa should follow the instructions at the following link to make sure they are in compliance.
<http://www.oit.sfasu.edu/disted/facsup/f1visa.html>

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Course Outline

Summer II, 2010

| Title | Chapter |
|---------------------------------|-------------------------------|
| Vibrations and Waves | 19 |
| Sound | 20 |
| Musical Sounds | 21 |
| Exam 1 | Jul 20 |
| Properties of Light | 26 |
| Light Emission | 30 |
| Color | 27 |
| Reflection and Refraction | 28 |
| Light Waves | 29 |
| Light Quanta | 31 |
| Exam 2 | Jul 28 |
| Newton's First Law | 2 |
| Linear Motion | 3 |
| Newton's Second Law | 4 |
| Newton's Third Law | 5 |
| Momentum | 6 |
| Exam 3 | Aug 05 |
| Energy | 7 |
| Rotational Motion | 8 |
| Gravity | 9 |
| Projectile and Satellite Motion | 10 |
| Exam 4 | Aug 13 $10^{15} - 12^{10}$ |