

General Physics 1500 and 1501

Auburn University

Spring Semester 2008

Lecturer : *Dr S. Loch*

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Office : *113 Allison Lab*

Office hours : *Monday 3:30-5.00 pm*

Friday 9-11am. Other times by appointment.

Class hours : *MWF 8:00am PKH 307*

Recitation : *Monday**

Laboratory : *Wednesday**

**Room assignments and times will be posted on the bulletin board outside PKH 103.*

Textbook : College Physics Volume I : 7th Edition
Serway/Faughn
Chapters 1-14

Lab Manual: Physics One – A Laboratory Text book – 5th Ed or 6th Ed..
Marllin Simon, Contemporary Publishing, 2003

Academic honesty: The Student Academic Honesty Code is printed in the Tiger Club and it is expected that you are familiar with and will abide by this code. If you are caught cheating in an exam, or assisting someone to cheat, you will be given a zero grade for that exam, and reported to the academic honesty committee, where further action may be taken.

Special accommodations: Students who need accommodations are asked to arrange a meeting during office hours the first week of class, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternative time can be arranged. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with The Program for Students with Disabilities, 1244 Haley Center, 844-2096.

Laboratory: The laboratory associated with this course is Physics 1501 and all sections will meet every Wednesday. A Lab schedule is shown below. It will be to your advantage to read the Experiment and/or Lab Handout before attending the lab. Each lab day you will submit a report that will be evaluated by your lab instructor. No make up labs will be given, however one lab will be dropped. If a lab is missed, that will be your drop. If a second lab is missed and you can document that both labs were missed for a valid reason, you will be allowed to participate in a makeup lab experience that will be used for the second lab. Adequate documentation must be provided. The lab grade will be made up from the grades of your lab reports. The first lab day will be the 9th January.

Recitation: The recitation associated with this course is Physics 1501 and all sections meet every Monday. The recitation will usually consist of three parts. The instructor will work through the solution to a couple of important problems. There will be a time to work on the homework problems for that week, with guidance from the recitation instructor. There will then be a short quiz, which will be graded by the instructor. A cheap calculator with the following functions should be adequate for problems and lab: $1/X$, $X^{1/Y}$, SIN, COS, TAN, LOG, LN, X^Y , RAD, DGR. **The key to success in the course is the homework.** Your recitation grade will be made up from the results of the recitation quizzes. No make-up quizzes will be provided, however one quiz will be dropped. If you miss a quiz, this will be your drop. The first recitation day will be the 14th January.

Homework problem assignments: A number of problems (usually about 10) will be assigned for each chapter. The homework will not be graded, instead the solutions will be posted after the deadline for the homework has passed. It is strongly in your interest to do the homework, only by working through the questions yourself will you learn the problem solving skills you will need for the class tests and recitation quizzes.

Classroom response system: Most days you will respond to a number of in-class questions with a wireless response system. These are sometimes called ‘clickers’. Answering these questions will register your attendance in the class. These questions will be conceptual in nature and are to test your understanding of the basic principles in each section. 5% of your final grade will be made up from your clicker responses. **It will be necessary for you to buy your own clicker from the Auburn bookstore, they are called “iclickers”. They can be purchased from the Auburn bookstore, and it should be possible to trade them back to the bookstore at the end of the semester. We will register your iclicker during the first few recitation and lab classes.**

Exams: We will have three one-hour class tests. Each class test will cover four chapters and about twelve class days. The strategy is to split the course into segments and then master these segments one at a time. Considerable depth and mastery of content will be expected. The class tests will be written in such a manner that they are physics exams, and not arithmetic exams. There is a strong problem solving nature to physics, thus you will need to use problem solving skills to work out how to answer questions that will be different from those you will see in the homework and recitations. If you miss an exam, and you document that the exam was missed for a valid reason, you will be allowed to participate in a makeup exam. However, you must inform me within 3 days of the missed exam that a makeup exam will be required. Valid documentation must be provided. All exams and the final exam are **closed book exams and you cannot bring in any notes and/or cards**. After your exam has been returned to you, you will have two weeks in which to check for errors in the grading. After two weeks have passed, your exam grade will be fixed.

Final Exam: The final exam will be comprehensive. Final exam questions will be designed to allow students to demonstrate that they have mastered all parts of the course

and that they are also able to combine their knowledge of these segments to work more comprehensive problems.

Grade assignments:

Laboratory	10.0%
Recitation	10.0%
Classroom response system	5.0%
Three one-hour exams	45.0%
Final Exam	30.0%
Total	100.0%

Grade breakdown:

A	90 – 100%
B	80 – 89.9%
C	65 – 79.9%
D	50 – 64.9%
F	below 50%

Important dates

First day of class

Labs start

Recitation starts

Marin Luther King day (no lecture or recitation)

Spring break

Exam I

Exam II

Exam III

Last day of classes

Final Exam

: 9th January

: 9th January

: 14th January

: 21st January

: 17-22nd March

: 6th February (chapters 1-4)

: 10th March (chapters 5-8)

: 18th April (chapters 9-12)

: 29th April

: 3rd May

Lab Schedule

Date	Exp	Title
01/09	---	Introduction to lab and diagnostic quizzes
01/16	2M	One dimensional motion
01/23	1M	Vectors
01/30	3M	Two dimensional motion
02/06	4M	Newton's Laws
02/13	5M	Work-Energy Theorem
02/20	6M	Inelastic Collisions
02/27	10M	Centripetal Forces
03/05	7M	Equilibrium of a Rigid Body
03/12	8M	Rotational Dynamics
03/19	---	SPRING BREAK
03/26	1F	Archimedes Principle Solids
04/02	IGL	Ideal Gas Law
04/09	1H	Specific Heat
04/16	2H	Latent Heat
04/23	9M	Simple Harmonic Motion

Changes: The instructor reserves the right to make reasonable modifications to the course syllabus in the event a situation arises that warrants a modification. For example, a chapter might be omitted if we get behind schedule.