

Physics 103

Textbooks: College Physics Serway and Faughn, Physics 103 Lab Manual

Jan. 24	Chapter 1	1-6, 12, 20, 35, 36	NO LAB
Jan. 26	Chapter 2	2-3, 18, 25, 31, 39	
Jan. 28	Discussion	1-29, 30, 2-55	
Jan. 31	Chapter 3	3-3, 4, 11, 18	M1
Feb. 2	Chapter 3	3-25, 34, 44, 51	
Feb. 4	Discussion	3-48, 50	
Feb. 7	Chapter 4	4-1, 2, 15, 20, 21	M2
Feb. 9	Chapter 4	4-28,37,46,55	
Feb. 11	Discussion		
Feb. 14	Hour Exam		M4
Feb. 16	Chapter 5	5-1,9,12,23	
Feb. 18	Discussion	On Exam	
Feb. 21	Chapter 5	5-29,32,36,49,81	M7
Feb. 23	Chapter 6	6-3,47,17,19	
Feb. 25	Discussion	5-61,66	
Feb. 28	Chapter 6	6-23,32,36,41,62	M5
Mar. 2	Chapter 7	7-1,2,9,23,25	
Mar. 4	Discussion	6-31; 7-14	
Mar. 7	Chapter 7	29,53,68	M10
Mar. 9	Chapter 8	8-2,10,18,26	
Mar. 11	Discussion	7-72; 8-1	
Mar. 14	Hour Exam		M9
Mar. 16	Chapter 8	8-27,40,50,73	
Mar. 18	Discussion	On Exam	
Mar. 21	Chapter 9	9-3,6,19,33,48	M11
Mar. 23	Chapter 10	10-1,8,13,15	
Mar. 25	Discussion	9-24,71;10-16	
Apr. 6	Chapter 10	10-17,32,38,41	NO LAB
Apr. 8	Chapter 11	11-1,11,14,40,60	

Apr. 11	Chapter 12	12-1,8,13,19	M14
Apr. 13	Chapter 12	12-23,25,38,45	
Apr. 15	Discussion	11-38;1-9,50	
Apr. 18	Hour Exam		H1
Apr. 20	Chapter 13	13-1,2,11,13,17	
Apr. 22	Discussion	On Exam	
Apr. 25	Chapter 13	13-25,34,42,51	H2
Apr. 27	Chapter 14	14-1,6,11,14	
Apr. 29	Discussion	14-13,41	
May 2	Chapter 14	14-31,34,45,71	S1
May 4	Chapter 15	15-1,4,9,16	
May 6	Discussion	15-23,60	
May 9	Chapter 15	15-2,11,35,52,55	MAKE UP LABS
May 11	Review		
May 13	Discussion		

FINAL EXAM - May 19, 1994 12:25 PM

Grading

2 best of 3 Hour Exams	200
Final Exam	200
Quiz	100
Lab	<u>100</u>
Total	600

PHYSICS 103

TA Guidelines-Please read and comment

We are instructing a large number of students, and we must try to maintain a coherent and fair system of teaching and grading. Team work is only possible if there is lots of communication. I propose the following guidelines:

STAFF MEETINGS

- These weekly meetings should last approximately 1.5 hours. We will discuss problems and ideas about the lecture and discussion sections, as well as the laboratory experiments.
- Attendance at the weekly TA meetings mandatory; it is essential to maintain a coherent teaching agenda for the team as a whole.
- All quizzes and handouts should be brought to the meeting and kept in a binder so all can benefit from each others experience.
- Exam study questions should be prepared in advance by the TAs and myself and distributed to all sections .

DISCUSSION SECTIONS

- The TA should give classroom quizzes on weeks 3, 6, 11 and 15; quizzes should not take longer than 15 minutes (two simple problems), one of the problems should be very similar to an assigned homework problem.
- The TA should not endeavor to give material additional to what was given in lecture, but should clarify the principles of the lecture material using the same notation used by the lecturer. The discussion section should not be used to discuss the homework, but rather to explain how to go about setting up a physics problem. You should feel free to discuss the homework during consultation hour.
- Each week two of the assigned homework problems will be selected for grading, the TA should grade these in the following way: 0 for no work; 3 for a good try; 6 for a correct (almost) answer. The remaining homework problems should be check marked to show that the TA is seeing that all were tried and a grade 1 should be assigned. Homework should be picked up on Monday and returned in discussion section on Thursday. Homework solutions should be posted in the library every Tuesday; a schedule will be made so as to distribute the work evenly among TAs.
- The TA will keep a record of the lab grades and of the discussion session quiz and homework grades and will produce a number grade (0 to 100), for each student at the end of the semester. I suggest the relative weights should be: lab 40 % ; quiz 40 %; homework 20 %; the lab grade should contain some subjective estimate of the students industriousness. The average of the discussion section should be 75 .

Students get uptight if they know that the number grades given in another section are higher. Stress the fact that grades are normalized at the end. Very little weight should be given to the homework, since students do not necessarily do it by themselves, but the students should **NOT** be told this.

ATTENDANCE

T.A.'s are required to attend all lectures and should sit in the front three or four rows; this has four purposes:

- It allows the TA to know what was done in lecture, the notation used, and the parts that were done too quickly etc.
- The TA knows the way in which something was explained in lecture and can try to improve it, or use a different tack.
- During lectures, the TA's should address the lecturer, correcting blackboard errors, or asking what they consider is a question a student should ask; this encourages students to ask questions during the lecture.
- TA's are required to proctor all exams and to collect the exam papers of students in the TA's discussion sections.

LABS

- TA's must try out the lab in advance.
- In the laboratory the TA may give a 5 min introduction to the exercise but should not spend too much time doing this. The students are to be helped to perform the experiments as much as possible: the lab work should be like an apprenticeship, with your example and encouragement. The teaching assistant should not sit at the desk, but should circulate constantly among the various groups and see that nobody is at sea as to what to do next.
- A 5 min. lab quiz should be given at the beginning of every lab; the quiz is to be taken using the lab notebook not the lab manual; it should consist of one or two simple questions that a student that has understood the lab work of the previous week can answer easily. This will provide a large fraction of the basis of the lab grade.
- The lab notebooks should be looked at, but no effort made to do extensive grading on them (it is too hard and laborious); check that tables have titles, quantities have names, graphs have scales and units. The TA should initial and date each notebook immediately after the lab.
- Students should be told the lab notebook should be readable, but not unnecessarily neat.
- TA's are requested to provide additions, corrections and criticism to the lab manual.
- The students are required to take all labs in order to pass the course; for this reason it is absolutely essential that the TA keep an up to date record of attendance. The TA should initial the lab notebook at the end of each lab.
- The lab grade should be based on the 5 min quiz, the lab notebook and the TA's subjective feeling for the interest, industriousness and understanding of each student. The lab grade should be recorded immediately after each lab.