Physics 2211K -- Fall 2009

Text: Essential University Physics, by Richard Wolfson
Physics I Laboratory Manual
Prerequisite: Math 2253

The topic areas for this course are: Mechanics, Simple Harmonic Motion, and Waves. There will be five tests given during the semester. You are allowed to have one 8.5 × 11 page of formulas for each test. A sample formula sheet is available online. Each of the (regular) tests will include both free-response and multiple-choice items; the final exam will consist of twenty-five multiple-choice items.

The test schedule for this semester is:

Test 1	Chapters 2 & 3	Tuesday, September 15
Test 2	Chapters 4 & 5	Tuesday, October 6
Test 3	Chapters 6 – 9	Tuesday, October 27
Test 4	Chapters 10 - 12	Tuesday, November 17
Test 5	Chapters 13 & 14	Tuesday, December 8

The final exam will be scheduled later by the Registrar. *Do not make any plans* that might conflict with the final exam. The exam will occur sometime in the range December 12 - 16. You **must** be available during this time to take the exam.

Plan to take the tests as scheduled, as no make-up tests will be given. If one test is missed a replacement score will be created from the corresponding problems on the final exam. [If the absence was *unavoidable* and the reasons for it are *verifiable*, then the reasons must be submitted *in writing*, along with appropriate documentation, upon your return to class.] If more than one test is missed without such reasons (or if they are not provided) a grade of zero will be assigned for each missed test after the first. [The replacement procedure described is applied for each *excused* absence.] If *at least* three tests are taken and there have been *no un-excused* test absences, the lowest test score will be compared to a score produced from the corresponding material on the final exam and the higher of the two grades will be used as the score for that test. There are *no exemptions* from the final exam.

The point credit distribution for the class is as follows:

5 tests @ 9 points each	45 points
Homework	7 points
Quizzes	8 points
Laboratory	15 points
Final Exam	25 points

Note that passing the lab is a requirement for passing the course. In this case, "passing the lab" means attaining a score of *at least* 8.0 of the 15 points available.

Homework problems will be assigned for each chapter covered. The tests and the final exam for this course will be primarily problem based instruments, though each will also include conceptual items. The homework problems are intended to provide practice for the tests. The assigned homework sets represent a minimum number of problems for the material covered; if you find particular areas to be difficult you should find similar problems to those assigned and do those also.

Collection of homework will not be announced in advance but will occur frequently. No problems, however, will be collected during the last class meeting prior to a test. The problem to be turned in will be due as soon as it is announced. *Problems cannot be turned in at any other time*. Quizzes will occur at the end of some of the recitation periods, and will not be announced in advance. There will be no make-up quizzes given. The combined total of tests, quizzes, and homework cannot exceed 60 points.

The last day to withdraw from this course with a grade of 'W' is Tuesday, October 13.

Any student who believes that he or she has a disability that produces a need for special accommodations, and who has not already done so, should contact the ATTIC to determine if he or she is eligible for special assistance. Any student who has already been determined by the ATTIC to require special assistance should notify the appropriate course instructors as soon as possible. No special accommodations can be made without approval from the disabilities coordinator at the ATTIC.

Course Learning Outcomes

Students completing this course will be able to:

(1) explain and interpret physical situations as stated in a word problem using calculus as a tool.
(2) identify the physical laws appropriate to the physical situation at hand
(3) predict the behavior of representative physical systems using calculus and physical laws as a tool.
(4) interpret the outcome of a physical system using calculus as a tool.
(5) use various types of data collection tools for the experimental investigation of physical laws
(6) represent physical systems in multiple representations: i.e., mathematically, pictorially, graphically, etc.

Additional Notes

In reference to the note on the front page regarding a limitation of the total test, quiz, and homework points to 60: more than 7 homework problems will be collected, and more than 8 points will be available from quizzes. [The extra problems *are* the make-up opportunity; there will *not be* any other opportunity to *make-up* homework problems or quizzes.] Individual tests will actually contain slightly over the nominal nine points. [Generally, that will be around ½ point.]

Recitation will be used to reinforce the lectures; new material will not be introduced during the recitations. The recitation meetings will mainly consist of additional examples. There will, of course, also be the opportunity to ask questions in a smaller group setting. As previously noted, the quizzes will be given at the end of some of the recitation periods.

If you have taken PHYS 2211K or PHYS 1111K, here at SPSU, within the last 2 years, and you passed the lab, you may choose to re-use your previous lab score. Note that you will still need to sign up for a lab section of this course. If you want to re-use your lab score, see Ms. Cosme in the Biology, Chemistry, & Physics office (E183). You will need to fill out a form specifying when and with whom you previously took the lab. The deadline for filing the request is the end of the first week of scheduled labs, which is Friday, September 4.

It is the policy of the Biology, Chemistry, & Physics department that no withdrawals will be allowed after the official deadline for withdrawal (Tuesday, October 13) unless the reasons for such withdrawal are entirely non-academic. Any such withdrawals can be approved only by the department head, Dr. Patterson.

Selected problem solutions and suggested formula sheets are available at : www.spsu.edu/science/physics/thackston.

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Office Hours: M, W 9:00 – 9:50
M, T, Th 3:00 -- 3:50