

Professor:

Dr. C.O. Alley Dr. Almaz Mustafin

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Office Hours: M, W: 11-12 AM

And by appointment

Teaching Assistant:

(Office hours to be provided later)

Lecture Demonstration Assistant:

Erin Lynch

LECTURES: M, W, F, 9:00-9:50 AM, Physics Lecture Hall Z-1410**TEXTBOOKS REQUIRED:**

Physics: A World View, by Kirkpatrick and Francis, 5th Edition, published by Brooks/Cole-Thomson Learning (2004). ISBN 0-534-40824-9

Problem Solving for Physics: A World View, by Kirkpatrick and Francis, 5th Edition, published by Brooks/Cole-Thomson Learning (2004). ISBN 0-534-40825-7

Knowledge and Wonder, by V. F. Weisskopf, 2nd Edition, MIT Press (1979).

(Out of print. Xerox copies will be distributed to students without charge.)

Textbook Recommended:

Powers of Ten, by Philip & Phylis Morrison and the Office of Charles and Ray Eames, Scientific American Library, 3rd printing, 1999. ISBN 0-7167-6008-8

TESTS:

Three (3) 50-minute tests will be given. It is required that you take each test. Only for verifiable medical or other valid reasons will exceptions be made. No make-up tests will be given.

FINAL EXAMINATION:

The final exam is scheduled on Monday, 19 December 2005, from 8:00 to 10:00 AM. The location will be announced before the examination. Please verify this schedule during the last week of classes as it sometimes changes.

In order to pass this course you must take and pass the final examination.

HOMEWORK:

Daily homework assignments consisting of conceptual questions and numerical problems will be given and are due during the class on the date designated. Late homework will be accepted only with the permission of the instructor. Each homework assignment will be graded. Unexcused late homework assignments will be marked down. The total will count 25% toward your final grade.

Organize your homework solutions clearly so the grader can understand them, and so that you can understand them later when studying for the tests and the examination. Use a writing instrument with adequate contrast so the work is easily legible. (This remark applies even more strongly to your tests, quizzes and final examination.)

Xerox copies of solutions to homework problems and answers to the conceptual questions will be provided after the assignments are handed in.

QUIZZES:

Occasional short (10 to 15 minutes) quizzes will be given, and their average will count 10%

toward the final grade.

On the examination, tests, and quizzes, you must show your steps, reasoning, and "working" to get full credit.

GRADING SYSTEM:

Your course grade will be computed on the following basis:

30 points - Final exam.
35 points - Best two out of three tests.
25 points - Homework problem sets.
10 points - Quizzes.

100 points - Total

Adjustments will be made for any significant differences in the difficulty of different tests.

To complete the course and obtain a passing grade you *must*:

- 1) Take all three tests.
- 2) Take **and pass** the final examination.

The grade "I" (Incomplete) is very exceptional and will be granted only to students who have satisfactorily completed the major portion of the course and who are unable to complete the course because of illness or other circumstances beyond the student's control.

CALCULATORS:

An inexpensive scientific calculator is needed for homework problems and for all tests and the examination. In addition to the usual arithmetic operations, it should have at least 1 memory location, produce the value of Pi on demand, and have sine, cosine, exponential and log functions, as well as arbitrary powers and roots, especially the cube root, needed for Kepler's third law calculations. Parentheses, statistical functions, and radian/degree conversion are also very helpful. A suitable calculator can be obtained inexpensively.

A few calculators are available in the Lecture Hall preparation area if you forget to bring your own to a test or the examination.