Syllabus: Modern Physics (Phys 3700)  

Instructor: Dr. Susanne Ullrich  
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Time: Tuesday, Thursday 11:00-12:15 (Period 3)  
Location: Physics Bldg., Room 327  
Office hours: Thursday 3:30-4:00, room 243

The course is intended to provide you with an introduction to modern physics, with emphasis on special relativity, quantum mechanics and atomic and molecular physics.

Textbook: “Modern Physics for Scientists and Engineers” by Stephen T. Thornton and Andrew Rex

Course format: A typical class will start with a 10min student review of the previous lecture, followed by a traditional lecture (powerpoint/blackboard) of new material and concludes with problem solving exercises in small groups. Attendance is mandatory and may be recorded. You are allowed two unexcused absences but any additional absences will result in a 5% reduction (per missed class) of your final course grade.

Graded work:

Tests: There will be three exams on selected chapters and one cumulative final exam. There will be no make-up exams. Out of these four exams, the three highest test grades will count towards your overall final course grade; the lowest test will be dropped. If a grade of zero is received as a result of academic dishonesty, that grade will not be dropped. The material to be covered in each test and test dates will be announced in the lecture. It is your responsibility to stay informed about all announcements. Tests are closed books and closed notes, but a formula sheet will be provided. You are not allowed to use any electronic devices during the test other than a basic scientific calculator.

Missed tests with a legitimate excuse: Please contact me immediately if you miss/know you will miss any tests with a legitimate excuse. I consider an excuse legitimate if you can provide written documentation (a note on official letterhead signed by an appropriate authority: e.g. doctor). If you miss one test it will be counted as your lowest grade and dropped. If you miss more than one test with a legitimate excuse please contact me for special arrangements.

Student presentations: You are expected to either present one 10min summary of the previous lecture or (as part of a group) one review session of test materials. In addition, you are also expected to present at least three problems from the group exercises to the entire class.
Problem sets: Homework problem sets for each chapter will be assigned and collected for grading on the specified due dates. There will be no make-up for missed homework.

Your final grade will be calculated as follows:
20% for each test (i.e. total 60%)
20% problem sets
20% classroom presentation

Grading scheme: Use of the plus/minus system is a requirement – it is the only grading system approved for the University of Georgia.

A: 100 – 87   B+: 84, 83   C+: 69, 68   D: 54 – 40   F: 39 – 0
A-: 86, 85   B: 82 – 72   C: 67 – 57
B-: 71, 70   C-: 56, 55