

Physics 222, Modern Physics, Summer 2007

Dr. Joseph H. Ross, or B03 ENPH 845-7823 (or 422 ENPH 845-3842 alternative)
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Office hours: M 1:30-2:30; W-F 11-12 AM or by arrangement

Dr. Joe Musser, 411 ENPH, 845-3331 (to use during office hours)
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Email: joered@tamu.edu. Office hours: to be announced in second half.

Lectures: MWF 12-1:25, 202 Engineering-Physics Building (ENPH)

Required text: *Modern Physics*, Thornton and Rex, third edition

Grading:

3 hourly exams (20% each)	60%
Comprehensive Final (Aug 10)	30%
Homework	10%

This course covers Special Relativity and Quantum Theory, and related topics developed in physics in the period since 1900. This includes physics of the atom, and will lead up to an introduction to solid state physics and nuclear physics. The order of topics will be that of the text, and will follow the schedule below (subject to change as the course proceeds):

May 30, Jun 1	read ch. 1 (all) and ch. 2, sections 1 - 5
Jun 4, 6, 8	read ch. 2, sections 6 - 13
Jun 11	ch. 2 continued.
Jun 13 (Weds.)	Exam A covers chapters 1 and 2
Jun 15	read ch. 3, all.
Jun 18, 20, 22	ch. 3 continued.
Jun 25, 27	read ch. 4, all.
Jun 29 (Friday)	Exam B covers chapters 3 and 4
Jul 6	read ch. 5, sections 1 - 3
Jul 9, 11, 13	read ch. 5, sections 4 - 7 and ch. 6, sections 1 - 3
Jul 16, 18, 20	read ch. 6, sections 4 - 7
Jul 23, 25, 27	read ch. 7, all
Jul 30	ch. 7 continued
Aug 1 (Weds.)	Exam C covers chapters 5 - 7
Aug 3, 6	read ch. 10, sections 2, 5, 6 and ch. 12, sections 7, 8
August 7	Final Exam (comprehensive) 1-3 PM

Although there are different instructors for the two halves, a **single grade** is assigned for the entire course, according to the grading scheme above. **Exams** will be held in class, as scheduled above, with the final exam held Aug. 7, 1-3 PM (the standard time for MWF 12:00 classes). In the case of a **missed exam** you should see the instructor, but a well-documented **excuse** is needed for any special arrangements. **Homework** will be assigned in class each week, and is graded.

First homework assignment:

due Jun 4 in class: Chapter 2, problems 6, 7, 9, 11, 13, 15, 16, 18, 21

ADA Note: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for with Disabilities, in Room 126 of the Koldus Building or call 845-1637.

Aggie Honor Code "An Aggie does not lie, cheat, or steal or tolerate those who do."

All work for this course will be governed by the Aggie Honor Code. To familiarize yourself with these rules they can be found on the web at: <http://www.tamu.edu/aggiehonor>.