Physics 34000 (34200 lab) - Modern Physics Lab

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Title:	Modern Physics Lab
URL:	http://www.physics.purdue.edu/∼mjones/phys34000
Offering:	Fall 2009, 1 credit.
Prerequisites:	Phys 24100, Phys 24200
Text:	Lab manual, available from BoilerCopyMaker, PLU: 7588
Description:	Students will conduct some of the most important experiments that have guided our understanding of physics over the past century. In doing so they will develop their ability to collect and analyse experimental data, to interpret their results and to present their findings and conclusions drawn from them in a clear, concise and convincing way.
Grading:	15% – e/m lab report 15% – First lab notebook reading 15% – Photoelectric effect lab report 15% – Second notebook reading 20% – Compton scattering lab report 20% – Final notebook reading
Disclaimer:	In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Information about this course can be obtained from the web page or by contacting the instructure.

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Proposed schedule:

Week 1	Week of Aug 24	Introduction, propagation of errors, uncertainty
2	Week of Aug 31	Start e/m experiment
3	Week of Sep 7	Finish e/m
4	**Week of Sep 14**	*Hand in e/m lab report*
		Start Stefan-Boltzmann experiment
5	Week of Sep 21	Finish Stefan-Boltzmann experiment
6	Week of Sep 28	Start photoelectric effect experiment
7	Week of Oct 5	Finish photoelectric effect experiment
	Oct 9, 5:00 PM	*Hand in lab notebooks*
8	Week of Oct 12	October break - no labs
9	**Oct 19, 12:00 PM**	*Hand in Photoelectric effect lab report*
	Week of Oct 19	Start Franck-Hertz experiment
10	Week of Oct 26	Finish Franck-Hertz experiment
11	Week of Nov 2	Start Compton scattering experiment
12	Week of Nov 9	Finish Compton scattering experiment
	Nov 13, 5:00 PM	*Hand in lab notebooks*
13	Week of Nov 16	Start experiment of your choice
14	Week of Nov 23	Thanksgiving break - no labs
16	Week of Nov 30	Finish experiment of your choice
17	**Week of Dec 7**	*Hand in lab notebooks*
		Hand in Compton scattering report