

Spring 2008

Physics of Lasers and Modern Optics

Physics and Astronomy 343

Course Syllabus and Information Sheet

Instructor: Stephen Ducharme Office: 256 Behlen or 265A/B Behlen, 472-8590
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Web Site: <http://physics.unl.edu/~ducharme/PHYS343/343Home.html>

Prerequisite—Phys 212 or 142 + a laboratory course in science or engineering.

Classroom—Brace Laboratory 301W

Text—[Online Manual](#), Hand-outs, and In-lab reference materials

Lab Notebook—60-sheet 5 by 5 quad 10 1/8 by 7 7/8 inches. Buy *2 identical* notebooks.

Lectures—One hour per week as arranged. Attendance *required*.

Laboratory—Three hours per week as arranged. Attendance *required*.

Grades—Two quizzes (10 %), laboratory preparation and notebooks (35 %), two formal reports (50 %), one oral report (5 %). No final exam (Yay!).

SCHEDULE:

Week	Exp.	Title	Assignment	Due *
Jan. 14-18	-----	First Meeting and Lecture 1, time day TBD No lab this week	Schedule & Survey	Jan. 15
Jan. 21-25	1	Laser Safety	Quiz 1	In Lab
Jan. 28-Feb. 1 Feb. 4-8	2	Optical Detectors (Subject of Formal Report 1)		
Feb. 11-15 Feb. 18-22	3	Basic Laser Operation	Quiz 2	In Lab
Feb. 25-29 Mar. 3-7	#		Formal 1	Mar. 3
Mar. 10-14 Mar. 24-28	#			
Mar. 31-Apr. 4 Apr. 7-11	#			
Apr. 14-18 Apr. 21-25	#			
Apr. 28-May 2	—	No lecture or lab., oral reports Schedule TBA	Formal 2	May 7

An Experiment of your choice, selected from the master list in the [Online Manual](#) Introduction.

* Formal Reports are due in my office by 5 PM on the specified date. Late reports lose 4% per weekday thereafter. Formal Report 1 to be done on Experiment 2. Formal Report 2 to be done on one of the 4 Experiments labeled \$. The subject of Formal Report 2 must be selected by April 18th.