

Syllabus for Physics 130-3 Summer 2009

Lecturer: David Taylor
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Textbook: *Physics, 6th Edition*, Douglas Giancoli
Class Web Site: <http://wildcat.phys.northwestern.edu/summer130/index.html>

Class: MTWThF 10:00 am - 12 noon, Tech L221

Discussion (not optional): MTWThF 9:00 - 9:55 am, Tech L221
Problem solving and quiz on the daily homework, which covers the previous day's lecture
Discussion TA: David Tabor, DavidTabor2007@u.northwestern.edu

Laboratory: Students must be enrolled in Physics Laboratory 136-3 concurrent to this course.
There are eight labs overall; students must pass at least six labs to receive a passing grade for the course. Each lab is two hours long. Details for the labs and the experiments to be done are given on a separate handout. The lab schedule is below.

Grade determined by:

- 30% Midterm Exam – Thursday, August 6 (1.5 hours long, starting at 9:00 am in the discussion)
- 40% Final Exam – Friday, August 14 (2 hours long, starting at 10:00 am)
- 10% Laboratory
- 20% Daily Quizzes (in the discussion)¹

¹ Make-up quizzes will NOT be given. However, the lowest quiz is dropped.

Attendance: Although I will not formally take attendance, due to the extreme speed of this course, it is **strongly** recommended that students attend every lecture.

Phyx 130-3 Lab Schedule

#	Date	Day	Experiment
Lab 1	July 30	Thursday	Sound
Lab 2	July 31	Friday	Snell's Law (refraction of light)
Lab 3	Aug 4	Tuesday	Lenses
Lab 4	Aug 6	Thursday	Double-Slit Interference
Lab 5	Aug 7	Friday	Single-Slit Diffraction
Lab 6	Aug 10	Monday	Intensity of Light
Lab 7	Aug 11	Tuesday	Ratio of e/m
Lab 8	Aug 12	Wednesday	Line Spectra

(Students in the 7 am lab do these experiments on the day after the one shown above.)

**Physics 130-3, Summer 2009
Syllabus**

**Instructor: David Taylor
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Date	Quiz Problems	Reading	Lecture Topic
July 29, Wed	No quiz	11.7 - 11.16	Physical Waves
July 30, Thu	11–39, 41, 47, 53, 56, 58, 63, 64	12.1 - 12.9	Sound
July 31, Fri	12–11, 14, 16, 29, 33, 51, 52, 54	23.1 - 23.10	Geometric Optics
Aug 3, Mon	23–4, 11, 16, 31, 33, 38, 47, 55, 58, 63, 66, 69, 90	24.1 - 24.12	Physical Optics
Aug 4, Tue	24–4, 10, 14, 25, 31, 41, 46, 58	25.1 - 25.12	Optical Instruments
Aug 5, Wed	25–12, 19, 25, 30, 35, 40, 49, 73	26.1 - 26.11	Relativity I
Aug 6, Thu	Midterm (Chap 11, 12, 23, 24, 25)	26.1 - 26.11	Relativity II
Aug 7, Fri	26–7, 13, 18, 24, 26, 45, 46, 72	27.1 - 27.9	Photons
Aug 10, Mon	27–5, 10, 12, 16, 22, 28, 35, 37, 41, 45, 47	27.10 - 28.8	The Atom
Aug 11, Tue	27-55, 69, 74, 28-5, 12, 20, 25, 38	30.1 - 30.13	Radioactivity
Aug 12, Wed	30-12, 18, 28, 38, 44, 48, 66, 73	31.1 - 31.3	Nuclear Energy
Aug 13, Thu	31-1, 4, 13, 20, 23, 27, 60, 62	31.4 - 31.9	Nuclear Medicine
Aug 14, Fri	Final		

Discussion quizzes cover the homework problems assigned for that day, as indicated above. The homework itself is not collected or graded.

The homework problems assigned for Aug 5 will not be on the midterm.

The homework problems assigned for Aug 13 are “fair game” for the final.