

Sept. 7, 2011

Syllabus – Physics 3310 – Modern Physics Laboratory

Instructor: Professor Paul Karchin
343 & 268 Physics Research Building
phone 577-5424
e-mail: karchin@physics.wayne.edu

Meeting Times: Mondays, 1:55-3:55 pm, Room 125, Physics Research Building

Office Hours: Students are welcome to stop by my office at any time - if I can't meet with you immediately, we'll make an appointment. The best way to contact me is by e-mail.

Course Description: Prereq: PHY 2140 or 2180; coreq: PHY 3300 or PHY 5015.
Laboratory course to accompany PHY 3300 or PHY 5015. Hands-on experience in logical and rigorous analysis of phenomena of modern physics.

Text: Class handouts.

Lab Data Analysis: Each group of 2 or 3 students will complete the required data analysis and submit a spreadsheet report to the instructor by e-mail before leaving the lab. At the discretion of the instructor, a group may be allowed to complete some of the analysis after class.

Class Attendance is required. Students are expected to actively participate in the laboratory work.

Grading: The course grade will be based on the best 8 of 9 reports. Students must have attended the lab session to receive credit for the report.

The course grade will be assigned according to the total number of percentage points as follows.

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
90- 100	85- 89	80- 84	75- 79	70- 74	65- 69	60- 64	55- 59	50- 54	45- 49	40- 44	0- 39

Policy on Missed Work: There are no make-up sessions. The grading scheme, dropping the lowest scored report (or missed session) will accommodate routine illness and personal contingencies.

Generally, if a student is registered for the course a regular grade will be given. A grade of incomplete (I) will be given only in exceptional cases (to accommodate illness or emergency) after consultation with Prof. Karchin before the end of the term.

Student Disability Services: If you have a documented disability that requires accommodations, you will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. SDS telephone number is 313-577-1851 or 313-577-3365 (TTY: telecommunication device for the deaf; phone for hearing impaired students only). Please discuss your registered accommodations with the instructor.

Lab Schedule – will be adjusted as needed throughout the semester.

Class Dates	PHY3310 Laboratory
08/31	no lab
09/07	computer and lab techniques 1
09/14	no lab
09/21	photo-electric effect
09/28	computer and lab techniques 2
10/05	Franck-Hertz experiment
10/12	e/m: electron beam in magnetic field
10/19	no lab
10/26	electron diffraction
11/02	Balmer spectrum
11/09	Stefan-Boltzmann law
11/16	no lab
11/30	radioactive decay
12/07	no lab