PHYSICS 472
Grad Lab

Time: 8:45 - 11:20 MWF  (SIS says 8:30 but I usually won’t arrive until about 8:45)

Instructor: Prof. John Ruhl

Office: Rockefeller 213  Office hours: Come find me anytime

Contact: Office: 368-4049
Email: ruhl@case.edu (the best way to contact me)

Textbook: None required. Useful references would include Horowitz & Hill, “The Art of Electronics,” and Bevington & Robinson, “Data Reduction and Error Analysis for the Physical Sciences.”

Course outline:
Weeks 1-5: Labs in Rock316 covering electronics, programming, data collection and analysis.
Weeks 5-10: Project 1 (in groups of 2 to 3).
Weeks 11-15: Project 2 (in groups of 2 to 3).

Grading:

- 30% participation and completion of labs in weeks 1-5.
- 28% project 1 performance and write-up.
- 28% project 2 performance and write-up.
- 7% project 1 presentation
- 7% project 2 presentation

- The project performance and write-up grade is based on successful completion of the project objectives, and a quality write-up including background, methods, results, and conclusions. If the project objectives are not met, full credit is still possible if a reasonable effort has been made to get things working.

- Excessive absence or lateness will affect participation and performance grades.

- Everyone is responsible for turning in their own project write-ups (written independently from your partner). Each group will jointly give a presentation at the end of the project 1 and 2 periods to communicate the results to the rest of the class.

- Curve: A ≥ 90%,  90% > B ≥ 80%, 80% > C ≥ 70%, 70% > D ≥ 60%