

## Physics 4410/6510 Spring 2009

### Teaching Staff:

Don Hartill	234 Newman Lab	255-8787,4882	dlh13@cornell.edu
Georg Hoffstaetter	118 Newman Lab	255-5197	gh77@cornell.edu
Paul McEuen	510 Clark Hall	255-5193	plm23@cornell.edu
David Rubin	112 Newman Lab	255-3765	dlr@cesr10.lepp.cornell.edu

*Prof. McEuen is in charge of all administrative matters.*

### Lab Director:

Nick Szabo	308 Clark Hall	255-2374	ns53@cornell.edu
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**Times:**     **Lectures:** Monday 2:30-3:20 115 Rockefeller

**Lab:** Third Floor, Clark Hall

                  Instructors present: Tuesday, Wednesday 1:25-4:25 PM

                  Lab open 8:30 AM – 5:00 PM Monday-Friday

*Schedule conflicts: You must be able to attend lectures, all of one lab period, and part of the other lab period.*

**Credits:**     Physics 410 students are expected to do at least 5 units and Physics 510 students are expected to do at least 6 units. Physics 400/500 students should make arrangements with Prof. McEuen.

**Assignments to labs:** Assignments to new experiments will be made by Prof. McEuen. Before you start a new experiment, your instructor must sign your “Driver’s License” and check you out on the safe operation of the equipment *before you turn anything on*. The instructor must also **sign you out** of the experiment before you can sign up for the next one. As soon as the instructor in charge of your experiment agrees that you have completed the data taking for the experiment and signs your notebook and “Driver’s License,” you can sign up for your next experiment.

### Physics 410/510 Lab DEADLINES

<i>Sign up for 1<sup>st</sup> Experiment</i>	Monday 1/19/09
1 <sup>st</sup> Lab Report	Monday 2/23/09
<i>Sign up for 2<sup>nd</sup> Experiment</i>	Tuesday 2/24/09
LAB CLOSED DURING SPRING BREAK	
2 <sup>nd</sup> Lab Report	Monday 3/30/09
<i>Sign up for 3<sup>rd</sup> Experiment</i>	Tuesday, 3/31/09
3 <sup>rd</sup> Lab Completed— <b>LAB CLOSES</b>	Friday 5/1/09
3 <sup>rd</sup> Lab Report	Wednesday 5/6/09
Final 1/2 hr. Oral Exam	Thur 5/7/08 and Fri 5/8/09 (Tentative dates)

## Physics 410/510 Monday Lectures (2:30 - 3:20 p.m., Rockefeller 115)

TOPICS ARE ALL TENTATIVE

Organizational Meeting	Monday 1/19/09
Labs: Measurement Techniques I	Monday 1/26/09
Labs: Measurement Techniques II	Monday 2/2/09
Labs: Statistics and Errors	Monday 2/9/09
Report writing	Monday 2/16/09
Research Ethics I	Monday 2/23/09
Research Ethics II	Monday 3/2/09
Labs: Vacuum and Cryogenics	Monday 3/9/09
Advanced topics	Subsequent Mondays

**Lectures are required.** If you miss a lecture, you are still responsible for the content.

**Office Hours:** In addition to the normal laboratory class hours, each instructor will be available for one hour each week for individual instruction and consultation at times to be listed on the information board in the laboratory, and/or by arrangement.

**Grading:** Labs: 85% of grade, both the report, your lab skills/etiquette, and lecture participation. Oral final: 15% of grade. (Oral exam covers the basics of the labs you performed, plus lecture material.)

**Final Note:** The deadlines listed on the previous page are *firm deadlines*. There will be a steep grade penalty imposed on late reports. (Starting at 10% off and increasing rapidly.)

