

# Physics 214: Introduction to Laboratory Electronics

Fall 2013

## Instructor:

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Office hours: TBA

**Lectures:** Monday / Thursday, 10:00 – 10:50, Elliott 162

## Text (required):

Neil Storey, *Electronics A Systems Approach*, fourth edition, Pearson Education, 2009

## Other (not required):

D.V. Bugg, *Electronics: Circuits, Amplifiers and Gates*, second edition, CRC Press, 2006.

**Prerequisites:** PHYS 102, 112, 120 or 122, MATH 100 or 102

**Course Description:** Introduction to standard laboratory equipment including a survey of linear circuits, digital electronics and non-linear devices such as diodes, transistors and operational amplifiers.

## Grade

Laboratory: 30%  
Assignments: 15%  
Midterm: 20%  
Final Exam: 35%

- You must **complete and pass (minimum grade of 50%) the lab** to obtain credit for the course.
- You must have a minimum grade of **40% on your final exam**. I will assign an F otherwise, even if your total grade for this course is more than 50%.

**Converting numerical scores to letter grades** I will follow the official scheme for conversion of numerical scores to letter grades. This marking scheme is:

A+	90-100	B+	77-79	C+	65-69	F	0-49
A	85-89	B	73-76	C	60-64	N	Not Complete
A-	80-84	B-	70-72	D	50-59		

The grade N is a failing grade that indicates that you did not complete the required course work. I will assign an N if you do not complete the labs. I will assign an F if you do not satisfactorily complete the labs or have a score of less than 40% on your final exam.

**Laboratory Assessment:** Each lab will be marked out of 10. The lab grade will be the average of the marks of all of the labs. Lab reports are due at the end of the lab period.

**Problem sets:** There will be approximately 9 problem sets. Problem sets are due at the beginning of class one week from the day they were issued. Answer keys will be handed out one week after the assignments were due. You are allowed *one late homework* without penalty, up to a week late. All other late homework assignments count 50% if completed before the answer key is handed out the following week. Afterwards, it counts 10% (there is still a little bit of value in copying over the answers to better understand them).

*Collaboration on the homework is at your discretion.* Each person is responsible for doing his/her share of the work, **writing up her/his own solutions and for listing his/her collaborators on each set.**

**Exams** are closed book. The midterm exam will be held in class. No makeups will be given.

**Calculator:** The only acceptable calculator for student use on exams (as per the department policy) is the Sharp EL-510RB. It is available at the UVic Bookstore for \$8.95.