Instructor: John A. Goree  
512 VAN, 335-1843, john-goree@uiowa.edu

Lectures: 301 VAN, Tu Th 9:30 - 10:45

Office Hours: 10:45–11:15 Tue and Thur, or anytime you wish to drop in. You may also phone for an appt.

Prerequisite: An introductory course on electricity and magnetism, also some calculus

Purpose: To train science students, both undergraduate and graduate, to:
  • build small practical circuits
  • make electronic measurements.

The laboratory is the focus of the learning experience in this course. The lecture serves primarily to prepare students for the laboratory.

This course is not highly theoretical. It has less math and less homework than most 100 level physics courses.


Textbook: Horowitz & Hill The Art of Electronics, 2nd Ed.

Laboratory: 561 VAN, beginning the first week

Directed by TA
You must provide:  a notebook with bound pages
lab manual sold by University Book Store

Always draw schematic (& oscilloscope waveform if any) in notebook.
You will be given a parts kit, value $20. It’s yours to keep. We bought it with your lab fees.

Special Project
  • Toward the end of the semester, you will design and build a circuit of your own to meet whatever purpose you like.
  • There will be no lectures and no regular lab exercises during this period.
  • You will give a 10-minute presentation in class on your proposed project.
  • You are responsible for finishing the project on time and paying for your supplies.

Homework: Six assignments.
Some assignments require Multisym software, which gives you a lab-like experience.
Draw schematic diagrams neatly. Staple the pages and draw a box around the answer.

Computer: Multisym software is available in 201 VAN. I recommend finishing before 5 pm.

Final Exam: 9:45 am, Tue, May 13, written, closed book, covers the entire course

Grading: Midterm Exam 10 %
Final Exam 30 %
Homework 10 %
Lab 25 % (for details, see lab grading policy on a separate page)
Lab Special Project 25 % (for details, see lab grading policy on a separate page)

Disabilities: If you are color-blind, tell the TA that you will need assistance with color codes. I would like to hear from anyone who has a disability which may require some modification of seating, testing, or other class requirements so that appropriate arrangements may be made.