Instructor  John A. Goree, 512 VAN, phone 335-1843

Lectures  Tu Th  9:30 - 10:45

Office Hours  You can see me immediately after lecture. You may also look for me at other times.

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

Laboratory  552 VAN, beginning the first week.
Directed by TA
A notebook with bound pages is required
Always draw schematic (& oscilloscope waveform if any) in notebook
Lab manuals: available from University Book Store, used beginning the first week

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 supplies. Plan ahead.

Homework  Six assignments
Staple the pages and draw a box around the answer.
Draw schematic diagrams neatly; square-grid paper may help.

Computer  Several assignments using “Multi-Sym.” May be done in room 201 VAN.

Exams  Midterm Exam: Oral, 20 min, emphasis on concepts rather than calculations
Written Final Exam: 7:30 am, Wed May 9, closed book, covers the entire course & lab

Grading  Midterm Exam  10 %  Lab  25 %
Final Exam  30 %  Lab Special Project  25 %
Homework & computer exercises  10 %