

Lecture	301 VAN
	9:30-10:45AM, Tuesday, Thursday
Web page	http://dusty.physics.uiowa.edu/~goree
Text & Stuff to Print	<ul style="list-style-type: none"> • <i>required</i> Horowitz & Hill, The Art of Electronics, 2nd Ed. • <i>recommended</i>: Kaplan & White, Hands on Electronics • <i>on reserve</i>: Simpson, Intro. Electronics for Scientists <p>Print lab manual, lecture notes & HW from course website.</p>
Prerequisites	<ul style="list-style-type: none"> • introductory course on electricity and magnetism such as 29:18 or 29:28 • some calculus
Goal of the course	<ul style="list-style-type: none"> • To train science students, both undergraduate and graduate, to: <ul style="list-style-type: none"> ◦ build small practical circuits ◦ make electronic measurements. • The laboratory is the focus of the learning experience in this course. The lecture prepares students for the lab. • This course is not highly theoretical. It has less math and less homework than most 100 level physics courses.
Multisim & Computer	<ul style="list-style-type: none"> • Multisim software is available in 201 VAN. It is required for several homework problems. The door is locked at 5 pm. For technical assistance, look for Larry Schroeder in 210 VAN before 5 PM. Printer problems are common; one alternative is pasting screenshots into a word document, saving on a flashdrive & printing elsewhere.
More	<p>If you are <i>color blind</i>, tell the TA that you will need assistance reading color codes in the laboratory.</p> <p>Departmental Office: 203 VAN, DEO: Thomas Boggess</p> <p>For each semester hour credit in the course, students should expect to spend two hours per week preparing for class sessions</p> <p>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. Please contact me during the first two weeks. You may contact me during my office hours.</p> <p>If you have a complaint: (1)The student should ordinarily try to resolve the matter with the instructor first. (2) If the complaint is not resolved to the student's satisfaction, the student should discuss the matter further with the course supervisor (if the instructor is a teaching assistant), the departmental executive officer, or, in some departments, another faculty member designated to receive complaints. (3) If the matter remains unresolved, the student may submit a written complaint to the Associate Dean for Academic Programs, 120 Schaeffer Hall (335-2633). (Graduate students should be directed to the offices of the Graduate College, 205 Gilmore Hall, 335-2137.)</p> <p>Cheating: If I suspect a student of academic fraud or cheating, I will inform the student in writing. I will report cheating to the dean and recommend discipline.</p>

Instructor:	John A. Goree
Office:	512 Van Allen Hall
E-mail:	john-goree -at- uiowa.edu <i>begin "subject" line of your email with 29:128</i>
Phone:	319-335-1843
Office Hours:	<ul style="list-style-type: none"> • 9:45 – 10:45 MWF or by appointment • If I'm not in my office, look for me in my labs (rooms 555, 518, 501), or in my assistant's' office (room 553)

What determines your grade (see also other page):

- Homework, 7 sets, 10%
- Lecture attendance & quizzes 5%
- Midterm exam 8%
- Final exam 17%
- Lab 35%
- Project 25%

Laboratory:

- 561 VAN, beginning the first week, directed by TA
- Lab manual: download from course website.
- You must provide a notebook with bound pages.
- You will be given a parts kit, value \$20. You make keep it. We bought it with your lab fees.

Quizzes given in lecture:

- 9:30 am sharp, 12+ days, 2 mult. choice questions, 2 min.
- To promote attendance, wrong answers receive 1/3 credit

Exams:

- Closed book
- Lab topics are included.
- Exam topics include: (1) *circuits*: identify a circuit; draw a circuit; explain a circuit's operation; choose a circuit to use in a given application; draw waveforms or frequency response curves; calculate: component values, voltage, current, power, gain, attenuation, roll-off frequency, truth-tables (2) *measurement methods*: explain method; identify method; calculate parameters when given a waveform.
- Midterm questions: 90% conceptual, 10% problem-solving.
- Final exam covers the entire course. 30% conceptual, 70% problem-solving or circuit design.

Project:

- Design, build and measure a circuit of your own.
- There are no lectures, no regular labs during this period
- 10-minute presentation in class on your proposed project.
- You are responsible for finishing the project on time and paying for your supplies.