

**EEL 3300 L**  
**ELECTRONICS LABORATORY**

<b>Prerequisites:</b>	EEL 3111
<b>Corequisite:</b>	EEL 3300 (Note: this course must be dropped if EEL 3300 is dropped)
<b>Laboratory Manual:</b>	<u>Lab Manual, Microelectronic Circuits and Devices</u> Moe Wasserman and Mark Horenstein, Prentice Hall, 2nd Edition, 1996.
<b>Course Outline:</b>	Lab Manual Experiments (10 weeks) Design Laboratory (2 weeks) Laboratory Practical (Last week)
<b>Grading Policy:</b>	Laboratory Reports 35% Laboratory Notebook 15% Design Lab & Formal Report 20% Prelabs 10% Laboratory Practical 20%

Grading scale: **A: >90%, B: 80-89%, C: 65-79%, D: 50-64%, F: <49%**  
These breakpoints may be lowered slightly depending on overall class performance.

**Class Policy:**

- A laboratory partner will be assigned to you at the beginning of the semester. There will be no groups larger than two students.
- Prelabs are expected to be completed prior to each lab.
- Each student will bring a bound (i.e. not spiral) laboratory book to the laboratory. All work should be recorded in the notebook as outlined in the handout, "Laboratory Policies and Procedures."
- A laboratory report will be required for each experiment unless otherwise specified by the instructor. Report format should adhere to the guidelines set forth in the handout "Laboratory Policies and Procedures."
- No late work will be accepted.

**Course Objectives:**

- At the conclusion of this course, you should be able to
- Analyze the current-voltage relationship of nonlinear elements including p-n junction diodes, MOSFET, and BJT.
  - Study the behavior of different types of dc power supply circuits.
  - Evaluate transfer characteristics of different amplifiers including voltage inverters and voltage followers under different bias conditions.
  - Determine the frequency response of simple amplifiers with capacitors.

- Design, construct, and evaluate a practical electronic circuit by using the knowledge students have gained in their circuit theory and electronics courses.