Southern Illinois University at Carbondale  
Fall 2008  
Syllabus: ECE 345 (Electronics)

Instructor:  
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Office Hours: MWF 10:00 to 11:30 AM, and by appointment.

Lecture: MWF 9:00 to 9:50AM, ENGR. A-308  
Labs:  
Section 001 Tuesday – 11:00 to 1:30 ENGR. E-237  
Section 002 Thursday – 2:00 to 4:30 ENGR. E-237


Course Topics:  
Introduction to electronics  
Ideal diodes, diode model, diode circuits  
p-n junctions, diode characteristics  
p-n-p structures, BJT characteristics  
BJT biasing and amplifiers  
FET characteristics, biasing, amplifiers, and CMOS digital logic circuits  
Ideal operational amplifiers (op-amps), op-amp application circuits, non-ideal characteristics of the op-amp

Evaluation:  
Quizzes (best 6/8) 30%  
Homework 15%  
Test 1 20%  
Test 2 20%  
Lab 15%

Note:  
- Students are responsible for all announcements made in class.  
- Emphasis will be given on the conceptual understanding of the subject-matter rather than on memorization of equations.