

Syllabus
EECS170A, Section B Fall 2006
Electronics I

Code 18220

Textbook: *Semiconductor Device Fundamentals*, Robert F. Pierret, Addison-Wesley, 1996.
Prerequisites: Physics 7D, EECS70A, and EECS70B
Co-requisites: Physics 7E

What I want you to learn about (“Outcomes”):

1. Basic properties of semiconductors
2. Carrier transport in semiconductors
3. p-n junction diodes and bipolar junction transistors
4. Transistor equivalent circuits and single stage amplifiers
5. How to design:
 - a. doping profiles of basic p-n junction diodes, basic bipolar junction transistors
 - b. single-stage transistor amplifiers

Lecture Hours: 3:30-4:50 P.M. T/Th
Lecture Classroom: SSL 228
Discussion Sessions: B1: Fr 9:00-9:50 A.M. IERF B011
B2: W 12:00-12:50 IERF B011
B3: Tu 7-7:50 P.M. ICF 102

Note: The first discussion of the quarter will be Tues. Sept. 26, 2006. There will be no discussion on Friday Sept. 22.

Instructor: Peter Burke, Prof. of Electrical Engineering and Cptr. Science
2232 Engineering Gateway
949-824-9326 pburke@uci.edu

Instructor Office Hours: 2-3:30 Tu/Th

Lab quiz Tuesday of 10th week 3:30-4:50 pm, Oct. 28, 2006

Teaching Assistant: Gloria Yang gyyang@uci.edu

T.A. Office: MSTB 216

T.A. Office Hours: To be announced

Grading Components: Homework 5%
Midterm Exam (Tuesday Nov. 7, 3:30-4:50 pm) 45%
Final Exam (Tuesday Dec. 5, 4-6 pm) 50%