Microelectronic Devices and Circuits aims to provide a basic understanding of analog integrated circuits, as well as an introduction to electronic devices. See the attached “Instructional Objectives” for more detail. The course consists of two 80-minute lectures per week, one discussion session at which the homework and lecture material will be reviewed, and one three-hour laboratory per week. The prerequisite is EECS 40.


Reserve Books: In addition to the textbook, the following references are helpful and will be on one-day reserve at the Bechtel Engineering Library:

Parallel Textbooks: useful for the material after Midterm I.

SPICE references:

Exams and Grading: There will be two midterms and a final exam. The midterms will be held on Thursday, October 13, and on Thursday, November 17 in the evenings and the final exam will take place 12:30-3:30 pm on December 20.

Your grade for the course will be determined approximately as follows:

   Homework 15%, Laboratory, 15%; Midterm I, 15%; Midterm II, 50%, Final exam, 40%.

In the past, there were approximately 40-45% A’s, 25% B’s, 25% C’s, and 5% D’s, F’s, and I’s.

Laboratory: The laboratory is based on a BiCMOS tile-array chip set from MicroLinear, Inc. that allows a series of experiments that are closely connected with the lecture material. Satisfactory completion of the laboratory is required in order to receive a grade in the course.

Homework Assignments: There will be weekly assignments during the semester, distributed on Tuesday and due at 5:00 pm the following Tuesday in a box labeled “EE 105” located in the Cory Hall undergraduate lounge. For homework assignments that include SPICE, no credit will be given unless the SPICE portions are completed. Solutions to the homework will be distributed at the following lecture.

Academic Dishonesty: See Department policy at http://www.eecs.berkeley.edu/Policies/acad.dis.shtml