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 and the reader, 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 Wednesday, March 2 from 7:00 – 8:30 and on Wednesday, April 13 from 6:30 – 8:00 pm and the final exam will take place 5:00 – 8:00 pm on May 18 in a room to be announced. The review sessions will be held Feb. 28, 7:00 – 8:30, 141 McCone Hall, April 11, 7:00 – 8:30, 105 North Gate Hall, and May 9, 7:00 – 8:30, 105 North Gate Hall.

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

- Homework 10%, Laboratory, 25%; Midterm I, 15%; Midterm II, 20%, Final exam, 30%.

Your final course grade will be determined approximately by the following guidelines:

- >82.5=A, 80-82.5=A-, 77.5-80=B+, 72.5-77.5=B, 70-72.5=B-, 67.5-70=C+, 52.5-67.5=C, 50-52.5=C-.

In my Fall 2001 and Spring 2002 EE 105 classes, there were 44% A’s, 25% B’s, 25% C’s, and 6% 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