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 three 50-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.


A reader including the Laboratory Manual and excerpts on basic circuit analysis and frequency-domain circuit analysis is available from Copy Central (Southside), 2560 Bancroft Way.

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

Parallel Textbooks: very useful for around 75% of the course material.


SPICE references:


Exams and Grading: There will be two midterms and a final exam. The midterms will be held on Wednesday, October 9 and on Wednesday, November 13 from 6:00 - 7:30 pm in Sibley, and the final exam will take place 8:00 – 11:00 am on Tuesday, December 17 in a room to be announced.

Your grade for the course will be made up approximately as follows:

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

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 Wednesday and due at 4:00 pm the following Tuesday in a box labeled “EE 105” located in the hallway outside 275 Cory. Assignments that would have been due just prior to a midterm exam will instead be due Thursday at 4:00 pm. 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 the EECS Department policy stated at [http://buffy.eecs.berkeley.edu/~ruth/ac.dis.html](http://buffy.eecs.berkeley.edu/~ruth/ac.dis.html)