

ECE 322 Winter 2003

Electronics I

Instructor:	Karti Mayaram (email: karti@ece.orst.edu)
Office:	Owen 244 (phone: 737-2972)
Office Hours:	Mon 2:00-4:00 pm
Teaching Assistants:	Prasad Talasila (email: talasila@ece.orst.edu) Sasi Kumar Arunachalam (email: arunachs@ece.orst.edu)
Course Objective:	Principles, analysis, and design of analog electronic circuits. Diodes, BJTs, and MOSFETs.
Web page:	http://www.ece.orst.edu/~karti/ece322.html
Grading:	Homework 10% Quiz (2) 10% Test (2) 30% Comprehensive Final Exam 25% Laboratory work 25%. Labs begin the week of 1/13 and the faculty-in-charge is Prof. Len Forbes. Please direct all lab related questions to him. Lab packets are available from the IEEE store.
Homeworks:	Some homeworks will be graded using a 10 (mostly correct), 5 (partially correct), or 0 (little or no effort) scale.
Quizzes:	The quizzes will be of 15 minutes each (closed book/notes). They will be given at the beginning of class on the following dates: Wed 1/22, Mon 2/24,
Tests/Final Exam:	The tests will be closed book (one page of notes allowed). Test dates (Monday): 2/10, 3/03. Final exam is on Tu March 18 at 9:30AM.
Cheating Policy:	Cheating is unacceptable.
TextBook:	Sedra and Smith, <i>Microelectronic Circuits</i> , Oxford University Press, <i>Fourth Edition</i> , 1998.
References:	Neamen, <i>Electronic Circuit Analysis and Design</i> , McGraw-Hill, 2001. Roberts and Sedra, <i>SPICE</i> , Oxford University Press, 1997.

Course Outline

(2 weeks)	Review. Diodes. (Chap. 1, Chap. 3).
(3 weeks)	BJTs, biasing, amplifiers, and current mirrors (Chap. 4).
(2 weeks)	MOSFETs, biasing, amplifiers, and current mirrors (Chap. 5).
(1 week)	Differential amplifiers (Chap. 6).
(1 week)	Opamps (Chap. 2).