ECECS 352: Electronics II, Winter 2010


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Goals: Study of analog circuit design including frequency response and feedback, with an introduction to digital integrated circuits.

Prerequisites by Topics: ECECS 351: Transistor biasing and analysis, equivalent circuits of active devices, basic logic circuits.

Grading: Two one-hour tests, each counts for 25 % of total grade
Two-hour final exam, 30 % of total grade
Homeworks 10 % of grade
Special assignments 10 % of grade
Homeworks and powerpoint presentations of notes covered in class will be posted on the web at: http://www.ece.uc.edu/~mcahay/ece352.html

Office Hours and TA: TBA


Topics: Textbook Sections

- Chapter 7: Amplifier low frequency response analysis and design (3 classes)
- Chapter 7: High frequency transistor models (2 classes)
- Chapter 7: High frequency analysis of BJT and FET amplifiers (4 classes)
- Chapter 8: Feedback principles and basic topologies (2 classes)
- Chapter 8: Feedback amplifier analysis and design (4 classes)
- Chapter 8: Feedback amplifier stability (2 classes)
- Chapter 11: Filter types and transfer functions (3 classes)
- Chapter 11: Tuned amplifier design (2 classes)
- Chapter 12: Basic RC and LC oscillators (3 classes)
- Chapter 13: MOS digital circuit design (5 classes)
- Chapter 14: Bipolar digital circuits (5 classes)
- Tests (3 classes)

List of ABET outcomes: \( a_1, a_2, a_3, c, e, k. \)