

Southern Illinois University at Carbondale
Fall 2009
Syllabus: ECE 446 Electronic Circuit Design

Instructor:

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Office Hours: MW 3:00–4:30 PM, and by appointment.

Lecture: MWF 11:00–11:50 AM, ENGR. A-222

Labs: T 1:00–3:30 PM, ENGR. E-237

Textbook: (1) Adel S. Sedra and Kenneth C. Smith, *Microelectronic Circuits*, 5th Edition, Oxford University Press, 2004. (2) Behzad Razavi, *Fundamentals of Microelectronics*, 1st edition, Wiley, January 28, 2008.

Course Topics:

BJT biasing and amplifiers {4 classes}
FET biasing and amplifiers {4 classes}
Single-stage amplifiers {5 classes}
Differential amplifiers {6 classes}
Frequency response of amplifiers {8 classes}
Feedback: circuits and stability {9 classes}
Multistage amplifiers {3 classes}
Tuned amplifiers and oscillators {3 classes}

Evaluation:

Quizzes (best 5/7)	25%
Homework	10%
Midterm Exam	20%
Project	10%
Final Exam	25%
Lab	10%

Note:

1. Students are responsible for all announcements made in the class.
2. Emphasis will be given on the *conceptual understanding* of the subject-matter rather than on memorization of equations.