EE 8223 Analog IC Design Fall 1998

CLASS POLICY & GUIDELINES

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Office information:

1) Simrall (EE Building)
   Room 233
   ph# 325-2196 (also Voice mail)
   Office hrs: Friday 9am-11am
   (or by appointment)

2) Microsystems Prototyping Laboratory
   Engineering Research Center (ERC)
   Room 211
   ERC ph# 325-2294 (also Voice mail)
   Office hrs: by appointment

Textbook: • Allen & Holberg, *CMOS Analog Design*, *2nd Ed.*, Oxford Univ. Press, 1987.

References:
- Laker & Sansen, *Design of Analog Integrated Circuits and Systems*, McGraw-Hill, Inc., 1994.
- Gray & Meyer, *Analysis and Design of Analog Integrated Circuits*. New York: John Wiley & Sons, 1984.
- Gregorian & Temes, *Analog MOS Integrated Circuits for Signal Processing*. New York: John Wiley & Sons, 1986.
- Tsividis, *Mixed Analog-Digital VLSI Devices and Technology*. New York: McGraw-Hill, 1996.
- + class handouts (reference papers, etc.)

Grading:

(2) Exams	40%
(1) Final	25%
Homework	25%
Project	10%
Total	100%

Grade assignment is on a 10-point scale.

Homework grades will be based on completeness of each assignment and the accuracy of select problems from each assignment. Be neat and concise; *do not* turn-in assignments which are difficult to grade. Engineering paper is preferred but not required.

The project report should also be concise. Use your favorite word-processing software to compile this report. Good grammar, correct spelling, and clear, accurate descriptions are expected.

Lecture Classes will meet at the ERC, room 20, from 12:30-1:45pm on Tuesdays & Thursdays. Class attendance is encouraged and strongly recommended. When a lecture is missed, it is that student's responsibility obtain a copy of those lecture notes from another a student, not from the professor.

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SYLLABUS

Course Topics and Order of Coverage

Week 1 (Aug25, Aug27):	Introduction and Background	Chpt. 1
Week 2 (Sept1, Sept3):	CMOS Technology	Chpt. 2
Week 3 (Sept8, Sept10):	CMOS Analog Circuit Modeling	Chpt. 3
Week 4 (Sept15, Sept17):	CMOS Device Characterization	Chpt. 4
Week 5 (Sept22, Sept24):	Analog CMOS Subcircuits	Chpt. 5
Week 6 (Sept29, Oct1):	Analog CMOS Subcircuits	Chpt. 5
Week 7 (Oct6, Oct8; **Test #1**):	CMOS Amplifiers	Chpt. 6
Week 8 (Oct13, Oct15):	CMOS Amplifiers	Chpt. 6
Week 9 (Oct20, Oct22):	CMOS Comparators	Chpt. 7
Week 10 (Oct27, Oct29):	Unbuffered CMOS Op Amps	Chpt. 8
Week 11 (Nov3, Nov5; Project Assignment):	Unbuffered CMOS Op Amps	Chpt. 8
Week 12 (Nov10, Nov12; **Test #2**):	High-Performance CMOS Op Amps	Chpt. 9
Week 13 (Nov17, Nov19):	High-Performance CMOS Op Amps	Chpt. 9
Week 14 (Nov24):	CMOS Data Converters	Chpt. 10
Week 15 (Dec1, Dec3):	CMOS Data Converters	Chpt. 10
Week 16 (Dec8, Dec10; PROJECT DUE)	CMOS Analog Circuits and Systems	Chpt. 11

Final exam date: Wednesday, December 16, 1998, 3:00-6:00pm

Other important dates:

Sept. 4 Last day for registration, adding or dropping a course without a "W"
Oct. 5 Last day to drop a class with a "W" grade

Disclaimer:

The syllabus is subject to change! Updated versions will be available on the course's homepage (www.ece.msstate.edu/~blalock/analog).