EE 5230 Analog Circuit Design   **2013 Fall Semester**

1. Course Description:

This course covers the analysis and design of analog integrated circuits. Extensive
use of EDA tools (HSpice and Cadence) is required in homework assignments.

2. Text books:

Design of Analog CMOS Integrated Circuits,

B. Razavi, McGraw Hill, 2001.

3. References:

CMOS Analog Circuit Design,

Oxford University Press, P. E. Allen and D. R. Holberg, 2011.

Analysis and Design of Analog Integrated Circuits,

P. R. Gray, P. J. Hurst, S. H. Lewis, and R. G. Meyer, Wiley, 2001.

4. Teaching Method:

Lecture: 3 hours

Outside study: 4 hours

5. Syllabus:

(as attached)

6. Evaluation:

Midterm:	30%	
Final:	20%	
Homework:	30%	(NO late homework)
Final project:	20%	

7. Prerequisites:

Electric Circuits, Electronics, Signals and Systems (recommended)

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Tentative Syllabus

1. Basic MOS Device Physics
2. Single-Stage Amplifiers
3. Differential Amplifiers
4. Frequency Response of Amplifiers
5. Feedback
6. Stability and Frequency Compensation
7. Operational Amplifiers
8. Oscillators
9. High Performance Operational Amplifiers
10. Switched-Capacitor Circuits