Course Information
EE 4340.001 Analog Integrated Circuit Analysis and Design
Spring 2015
Tues & Thurs : 2:30pm-3:45pm, ECSS 2.305

Professor Contact Information
Prof. Jin Liu
(972) 883-4393, jinliu@utdallas.edu, ECSN 4.506, www.utdallas.edu/~jinliu
Office Hours: Thursdays 3:50-4:50pm and by appointments

Course Pre-requisites, Co-requisites, and/or Other Restrictions
Pre-requisite: EE3311 Electronic Circuits

Course Description
Application of MOSFET and BJT large-signal and small-signal models to analyze and design amplifiers, analysis and design of current mirrors and differential amplifiers, analysis of frequency response of amplifiers, and feedback theories.

Student Learning Objectives/Outcomes
Ability to understand and apply MOSFET and BJT large-signal and small-signal device models
Ability to analyze large-signal and small-signal characteristics of single-stage amplifiers intuitively
Ability to analyze and design current mirrors
Ability to analyze and design differential amplifiers
Ability to analyze frequency response of amplifiers
Ability to understand and analyze feedback topologies

Required Textbooks and Materials
or

Suggested Reference Books

Assignments & Academic Calendar

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Grading Policy
The final grade will be determined using the following scheme:
Homework x 25% + Exam 1 x 25% + Exam 2 x 25% + Exam 3 x 25%

Homework will be assigned on a bi-weekly basis and be collected at the beginning of the class on the due date. No late homework is allowed. The homework solution will be posted on the professor’s webpage, with password protection.

All exams are closed book with one-page summary notes allowed for Exam 1, two-page summary notes for Exam 2, and three-page summary notes for Exam 3. Exams 1 and 2 are around the first and second 1/3 of the semester and Exam 3 is on the last day of class.

Course & Instructor Policies
Students are responsible for all course materials, announcements, notes, etc. given during our regular class meeting time.

It is the responsibility of the instructor to encourage an environment where you can learn and your accomplishments will be rewarded fairly. Any behavior that compromises the University’s rules of academic honesty will be reported to the University.