ECEN 326: ELECTRONIC CIRCUITS

• **Spring 2016:** MWF 3:00pm – 3:50pm CHEN 104

• **Instructor:** Sebastian Hoyos

• Office: 315D WERC

• Office Hours: TR 10:30am – noon

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• Prerequisite: ECEN 325

• Textbook: Fundamentals of Microelectronics, Second Edition by B. Razavi

- Learning Objectives: Analysis and design of CMOS integrated circuits amplifiers, frequency response of integrated circuits, feedback amplifier analysis and design, stability and compensation of integrated amplifiers, design of output stages.
- 1. Introduction
- 2. Differential Amplifiers
- 3. Current Mirrors
- 4. Active Loads
- 5. Frequency Response of Integrated Circuits
- 6. Feedback
- 7. Stability of Feedback Amplifiers
- 8. Output Stages
- Grading: Based on curve
- Midterm Exam 1: 20 Points
- Midterm Exam 2: 20 Points
- Midterm Exam 3: 20 Points
- Homework: 20 Points (No late homework will be accepted)
- Lab: 20 Points

Pre-lab (40%), Lab performance (40%), Final report (20%) - No points if any part is missing.

Individual pre-lab is required. Only one final report per lab group is necessary.

Pre-lab assignments will be collected by the TA at the beginning of each lab session.

Lab kits are available at the MSC Bookstore.

All lab reports are due in one week- Late reports will not be accepted.

- There will be no individual make-up exams except for emergency cases acceptable to the instructor.
- Laboratory safety guidelines need to be submitted online.
- Americans with Disabilities Act (ADA) Policy Statement:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability services in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

• An Aggie does not lie, cheat, or steal or tolerate those who do.

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