

EE 615  
Analog Circuit Design  
Spring 2008

Instructors:

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Textbook:

Franco, S., *Design with Operational Amplifiers and Analog Integrated Circuits*,  
3<sup>rd</sup> ed., McGraw Hill, 2002.

Topics:

1. Op amp fundamentals (1 class period)
2. Op amp circuits with resistive feedback (2 class periods)
3. Active filters (2 class periods)
4. Practical op amps (2 class periods)
5. Nonlinear circuits (2 class periods)
6. Signal generators (1 class period)
7. Nonlinear amplifiers and phase lock loops (1 class period)
8. Power from the wall (1 class period)
9. Standards survey and impact on PC board design (1.5 class periods)
10. Bipolar transistors and biasing (3 class periods)
11. Mosfets and Jfets (2 class periods)
12. Understanding real transformers (1 class period)
13. Linear power supplies and switching power supplies (2 class periods)
14. Digital circuits from an analog viewpoint (1 class period)
15. High frequency effects (1.5 class periods)
16. Noise in analog circuits (1 class period)

Grades will be based on:

Homework and projects: 20%

Midterm exam: 35%

Final exam: 45%

A final average of >90% will be guaranteed an A, a final average of >80% will be guaranteed at least a B, a final average of >70% will be guaranteed at least a C, etc.

The final exam will be on Tuesday, April 29 from 3:00-5:30 PM.

Homework is due at the beginning of class. No credit will be given once solutions have been made available.

Students are responsible for material covered in class. Make-up exams must be scheduled at least 48 hours before an exam if possible. Make-up exams are generally more difficult.

The academic honesty policy is fully described in the student handbook, and students are fully expected to adhere to it. Discussing homework is permitted, but the work submitted must be your own. Copying another person's work and turning it in as your own is not acceptable. Penalties for cheating range from a 0 on the assignment to an F for the course grade, and will be administered according to the student handbook.

Class notes, homework assignments and homework solutions are located on the web at <http://www.ece.uah.edu/~ljoiner/ee615>

Please email me if there are problems with the web site.