

# ECE 3710 E: Circuits and Electronics

## Spring 2004: TR 0830-0930, VL C240

**Instructor: Dr. John H. Bordelon, PE**

**Office Hours:** TBA, VL W315

**Email:** [john.bordelon@ece.gatech.edu](mailto:john.bordelon@ece.gatech.edu)

**Overview:** This course will provide a broad introduction to many of the topics dealt with in electrical engineering. Material will be presented beginning with physical and mathematical origins, progressing to linear circuit theory, and finally through various topics in analog and digital systems. An intuitive approach (hopefully more useful for non-EE majors) will be used rather than verbatim recitation of a textbook; in particular, additional course notes will be posted on the course website: [www.prism.gatech.edu/~gte421f/ece3710](http://www.prism.gatech.edu/~gte421f/ece3710) and discussed extensively.

**Textbook\*:** Hambley, *Electrical Engineering: Principles and Applications*, 2<sup>nd</sup> Ed.  
Michaels, ECE 3710 course notes (in progress)

### Grading Policy:

Homework/Pop-quizzes	20 %
Exams (4)	80 %

All four exams will be of similar length and will be weighted according to one of two grading scales:

1. If all homeworks are submitted, then the lowest exam grade will count 5%, and the others will be weighted evenly (25% each).
2. If not all homeworks are submitted, then all exams are weighted evenly (20% each).

### Basic Course Policies:

Exams will be closed book and closed note, but you will be allowed a note card for formulas – makeup exams will not be given without prior consent. Due to the large size of the class, exams will be given with West Point rules: when “pencils down” is called, anyone who continues working will receive an automatic zero.

Homework will be assigned approximately once per week and will be graded for both completion and a random selection for correctness. Full solutions will be provided on the due date, and no late homeworks will be accepted for a grade, period. Students failing to submit a homework on the due date may turn in the completed assignment (along with a signed honor code statement and the approved excuse) as specified by the instructor for a grade of zero, yet retain the first grading scale.

Students are encouraged to work in pairs or groups on homework concepts and suggested problems as long as all written work to be submitted is strictly individual. Random opportunities for extra credit may also be provided.

**Academic Honesty:** As in every other course at Georgia Tech, you are bound by the Academic Honor Code as published in your general catalog and modified recently by the Dean of Students. This includes surreptitious collaboration on exams/homework or any action that presents an unfair advantage or fails to show the integrity that Georgia Tech students should exude. Anyone caught cheating or acting in a deceptive manner will be forwarded to the Dean with a recommendation of an F in the course and suspension.

**What else? :** Any and all comments are welcome; despite having taught this class many times, I always learn something new and am open to ideas on how to present concepts better. Many of the specific details of the course may be negotiable, but a valid, overriding reason must be presented and concurred. If you have any questions or concerns, just let me know....

In lieu of regular office hours, I will often hold additional problem sessions for practice – attendance is strictly optional, and no new material will be presented. In addition, I will often make available practice exams and/or solutions to old tests prior to exams. A number of teaching assistants will be available for additional questions, with their schedules being sent out a few weeks into the term. I am always available via email.

The number one concern is that you learn a working engineer's vocabulary to relate electrical engineering to your field of expertise and are subsequently able to apply it to the EIT exam and general performance in coming years as a helluva engineer ☺

**Biography:**