

**GEORGIA INSTITUTE OF TECHNOLOGY**  
**School of Electrical and Computer Engineering**

ECE6500

Fall Semester, 2016

**TITLE:** "Fourier Techniques and Signal Analysis"

**INSTRUCTOR:** Professor Ali Adibi

**OFFICE HOURS:** MW 3:30-5:00 PM. There will be an open door policy. Feel free to come for asking questions at any time the door is open.

**CONTACT INFORMATION:**

Office: 208B, Email: adibi@ece.gatech.edu.

**TEXT:**

*R.N. Bracewell, The Fourier Transform and its Applications, Third Edition.*

**COURSE OBJECTIVES:**

Provides an introduction to the use of Fourier methods for analysis of signals along with potential applications.

**COURSE POLICIES:**

Lectures

Class lectures will be held on MW at 9:15-11:00 AM.

Homework

Homework assignments will be usually issued each week and will be due the following week (unless there is an exam that week). Each homework assignment is due at the beginning of the class corresponding to the due date. Late homework is accepted, but there will be a 20% penalty for each day. Collaboration on the homework problems is allowed and encouraged. However, each student must write the solution alone.

Exams

There will be two midterm exams and one comprehensive final exam. All exams will be closed book and notes. However, a one-page formula sheet will be allowed for the midterm exams, and three pages will be allowed for the final exam. Calculators are not to be used in the programmable mode on the exams.

Grades

Grades will be calculated based on the following two formulas, and the better grade will be considered. Note that there is a 5% extra credit for the option with homeworks.

	<b>Formula 1</b>	<b>Formula 2</b>
<b>Homework</b>	15%	0%
<b>Exam 1</b>	25%	30%
<b>Exam 2</b>	25%	30%
<b>Final Exam</b>	40%	40%