## GEORGIA INSTITUTE OF TECHNOLOGY

SCHOOL OF ELECTRICAL and Computer ENGINEERING

# ECE 4270 Fundamentals of Digital Signal Processing Fall 2012

#### Course Information

**Instructor:** Faramarz Fekri

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Class Hours: TTH, 1:35 PM- 2:55 PM

Office Hours: Tuesdays: 3:00 PM - 4:00 PM (location: Starbucks at Clough Commons),

Thursdays (if no TA): 3:30 PM - 4:30 PM (location: Centergy one BLD, room No. 5238)

**Text:** Oppenheim and Schafer, *Discrete-Time Signal Processing*, 3nd Edition (You may use 2nd edition)

Prentice-Hall, 2010.

**Reference:** Hayes, Digital Signal Processing, Schaum's Outline Series, 1999.

Prerequisite: Undergraduate ECE 3075 and ECE 2026 (old 2025) (or equivalent). In particular, you should

about discrete-time convolution, Fourier analysis, and random variables.

Grading: Homework 15%

Quiz #1 20% Quiz #2 20% Final 45%

## Homework:

The primary way to learn any EE subject is to WORK HOMEWORK PROBLEMS: as many as possible, and work them CAREFULLY. Homework will be assigned weekly on Thursdays and will be due at the beginning of the following Thursday class. Late homework will NOT be accepted for grading. Avoid the temptation to use old homework solutions as a short cut in doing the assignments. This practice tends to limit your own understanding of the material. Homework is to be written up and submitted individually. Working with colleagues is encouraged but simply copying someone else's solution is not acceptable and will be treated as such. Homework will be graded and solutions will be be available. The lowest HWK grade will be dropped from final consideration.

#### Quizzes:

Two quizzes will be given during class hours. The present schedule is to hold these quizzes in the first weeks of Oct. and Nov., respectively.

### Class Web Page:

http://users.ece.gatech.edu/~fekri/teaching/ece4270/fall2012/main01.html

## Honor Code:

Please uphold the academic honor code (see http://www.gatech.edu/honor/). Violations will be reported to the office of Vice-President for Student Services for investigation and penalties.

#### Excused absences:

No make-up quizzes will be given. If you are excused from a quiz, the next one will count for the one missed (in case you have to miss quiz 2, your final exam will count for quiz 2). In order to request an excuse from a quiz, a written note from a doctor or other official will be required documenting either the serious illness or other situation beyond your control. The written excuse must be given to Dr. Fekri immediately upon return to GT; no later than 3 days after the quiz.