E&CE 4670/6670 - INTRODUCTION TO DIGITAL SIGNAL PROCESSING

1st Summer Session 2015

On-Line Presentation

SYLLABUS

Instructor: Dr. John N. Gowdy
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Starting Date: Wednesday, May 13, 2015
Final Examination: Friday, June 19, 2015

Prerequisite: ECE 3300 – Signals, Systems, and Transforms

TOPICS: (and approximate number of hours on each topic)

I. Introduction (1)
II. Review of Discrete-Time Systems (5)
III. Applying the Z-Transform to Discrete-Time Signals and Systems (5)
IV. Digital Filter Design (14)
V. Realizations of Digital Filters (1)
VI. The Discrete Fourier Transform (5)
VII. Application Examples (2)

GRADING:

QUIZ 1 20%
QUIZ 2 20%
QUIZ 3 20%
HOMEWORK 15%
FINAL EXAM 25%

(If the Final Exam grade is higher than any of the three Quiz grades, the lowest Quiz grade will be replaced by the Final Exam grade.)

LECTURES

Lectures will be provided in the form of exe, html, and swf files which will be posted on the University's Blackboard System.
QUIZZES

If you will be on campus during the summer, the Quizzes and the Final Exam can be taken in a classroom in Riggs Hall. However, it will also be possible to take them at a remote site, subject to finding an acceptable proctor.

HOMEWORK

Homework assignments and solutions will be posted on Blackboard. Student will enter their homework answers on-line via Blackboard’s “test” feature.

COURSE SCHEDULE

Summer Session I begins on Wednesday, May 13, 2015. The Final Examination for this course is scheduled for Friday, June 19, 2015. A detailed schedule of lectures, homework assignments, homework due-dates, and exams will be posted on Blackboard.

OFFICE HOURS (for office visits or phone calls to 864 656 5249)

Office hours will be 2:30 - 3:30 pm daily. Questions can also be submitted at any time by email to jgowdy@clemson.edu. E-mail will be answered within a day.
ATTENDANCE

Since this is an on-line class, there is no attendance policy.

LATE HOMEWORK

Homework is due at midnight on the day when it is due. No late homework can be accepted. However, one homework grade will be dropped.

"LATE PROFESSOR" POLICY

Since this is an on-line class, there is no "late professor" policy.

OFFICIAL CLEMSON UNIVERSITY STATEMENT ON ACADEMIC INTEGRITY

“As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a ‘high seminary of learning.’ Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.”

“When, in the opinion of a faculty member, there is evidence that a student has committed an act of academic dishonesty, the faculty member shall make a formal written charge of academic dishonesty, including a description of the misconduct, to the Associate Dean for Curriculum in the Office of Undergraduate Studies. At the same time, the faculty member may, but is not required to, inform each involved student privately of the nature of the alleged charge.”

DISABILITY ACCESS STATEMENT FROM OFFICE OF STUDENT DISABILITY SERVICES

“It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities. Students are encouraged to contact Student Disability Services to discuss their individual needs for accommodation.”
ADDITIONAL REQUIREMENTS FOR ECE 6670

According to University Regulations, students enrolled in the 6xxx component of 4xxx/6xxx courses must be given additional requirements. Therefore, each ECE 6670 student will be given an extra assignment during the latter part of the semester. This will involve reading and summarizing a paper, or completing a Matlab-based design assignment.