Instructor
- Dr. X. Li, Office: NTRP B231, Tel: (940) 891-6875, Email: xinrong@unt.edu
  Office Hours: Tuesday and Thursday, 2:30 - 3:20 PM
  (Additional appointments can be requested by email.)

Course Description
- Introduction to modern digital signal processing theory and techniques. Includes discrete time signals and systems, sampling theorem, Z-transform, frequency analysis of signals and systems, discrete Fourier transform, fast Fourier transform algorithms, and digital filter design.

Prerequisites
- EENG 2620 or equivalent

Course Objectives
By the end of the course, you will learn
- Basic theories of digital signal processing;
- Analysis and design of digital signal processing systems and computational techniques.

Required Textbook
  Author: John G. Proakis and Dimitris G. Manolakis, Publisher: Pearson Education, Inc.
  ISBN: 0-13-187374-1

Course Requirements and General Policies
- Class attendance is mandatory. Lectures and class discussions will contain vital information needed to do well on the exams.
- Everyone must turn in individual homework. Simply copying other's homework will be treated as a violation of academic honesty.
- If you arrive late, please enter quietly and sit down. Do not walk in front of speakers or disrupt the class in any other way.
- Please remember to turn off phones prior to class.
- Please do not wait until the last minute. If you are having trouble with this class, please come by my office during office hours. I am also available by email.
• Please visit http://www.unt.edu/csrr for your rights and responsibilities.

Disability Accommodation
• The University of North Texas (UNT) complies with Section 504 of the 1973 Rehabilitation Act and with the Americans with Disabilities Act of 1990. UNT provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please see the instructor and/or contact the Office of Disability Accommodation (http://www.unt.edu/oda) at 940-565-4323 during the first week of class. It is the responsibility of students with certified disabilities to provide the instructor with appropriate documentation from the Dean of Students Office.

Assignments and Exams
• There will be 9 homework assignments. No late assignments will be accepted and no emailed assignments will be accepted, except in extenuating circumstances. Homework is due before the class in the following week.
• There will be 2 exams (this includes the final exam). Exams will be based on text readings, handouts, class exercises, class lectures and discussions, and homework assignments. Students are responsible for all text material, regardless of whether we review the text material in class or not. You will be allowed to make up a missed exam only if you have a documented university excused absence. If you know in advance that you will miss an exam, you must contact me before the scheduled exam.

Grading Policies
• Homework, 20%
• Mid-term Exam, 40%
• Final Exam, 40%
• There will be no extra credits.
• Final accumulated number score is on a 100 point scale.
• Final letter grade distribution: A=100-85, B=75-84, C=65-74, D=55-64, F=0-54

Course Outline and Tentative Schedule
• First Day of Class, 08/25/11, Thursday, 3:30 – 4:50 PM
• Course Introduction;
  Class 1: Introduction to Signals, Systems, and Signal Processing
• Class 2: Discrete-time signals and systems
• Class 3: The z-Transform and It's Applications
• Class 4: Frequency Analysis of Signals
• Class 5: Frequency-Domain Analysis of Systems
• Mid-term Exam, 10/13/11, Thursday, 3:30 – 4:50 PM
• Class 6: Sampling and Reconstruction of Signals
• Class 7: Discrete Fourier Transform
Class 8: Implementation of Discrete-Time Systems
Class 9: Design of Digital Filters
Final Exam, 12/15/11, Thursday, 1:30 – 3:30 PM

Useful Links
- Course webpage: http://www.ee.unt.edu/public/xinrong/courses/EENG5610/Fall11
- UNT Catalogs: http://www.unt.edu/catalog/
- Office of the Registrar: http://essc.unt.edu/registrar (schedule of classes and exams, etc.)
- Eagle Student Services Center: http://essc.unt.edu/