Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.


Grading: Homework 20 %
Exam 30 %
Projects (2) 25 % each

Content: The primary focus of this course is on various aspects of spectral estimation. Topics on both parametric and nonparametric spectral estimation methods will be covered. The applications of spectral estimation to diverse fields will be addressed.

Prerequisite: EEL 5544 and EEL 5701.

Instructor: Dr. Jian Li

Office: 465 EB; Phone: 392-2642; Email: li@dsp.ufl.edu
Office Hours: 5th and 6th periods on Tues and 6th period on Thurs., or by appointment.

Topics: 1. Introduction to spectral estimation and review of the fundamentals of digital signal processing – 2 lectures.


3. Nonparametric methods and the trade-offs between resolution and variance – 5 lectures.

4. Parametric methods including AR, MA, and ARMA methods and model order selection methods – 14 lectures.

5. General filtering problem including noncausal, causal, and FIR filters – 2 lectures.


Miscellaneous: Homework problems will be assigned and discussed on a regular basis. You are responsible for all assignments, changes of assignments, announcements of project due dates, and other course-related events which occur in class. No late project reports will be accepted.

Academic Honesty: All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action.

This statement is a reminder to uphold your obligation as a student at the University of Florida and to be honest in all work submitted and exams taken in this class and all others.