ELC 5356

Statistical & Adaptive Signal Processing

Spring 2017

34020 ELC 5356-01 Stat & Adaptive Signal Proc 3 TR ROGERS 207 11:00 AM - 12:15 PM

Instructor: Liang Dong

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Office Hours: TR 3:30 p.m. - 5:00 p.m.; other by appointment

Course Description:

Prerequisite(s): ELC 5354 Random Signals and Noise

Unified introduction to the theory, implementation, and applications of statistical and adaptive signal processing methods. Key topics focus on spectral estimation, signal modeling, adaptive filtering, and signal detection.

Textbooks:

Statistical and Adaptive Signal Processing: Spectral Estimation, Signal Modeling, Adaptive Filtering and Array Processing by Dimitris G. Manolakis, Ingle, and Kogon

Statistical Digital Signal Processing and Modeling

by Monson H. Hayes

Fundamentals of Statistical Signal Processing, Volume I: Estimation Theory by Steven Kay

(These are reference books. There will be seminal papers recommended during the semester.)

Homework and Exams:

There will be homework assignments and after-class reading assignments.

There will be one in-class midterm exam and one final exam.

Midterm Exam 11:00AM – 12:15PM Tuesday, March 14, 2017 Final Exam According to University Final-Exam Schedule

Performance Evaluation:

•	Homework	10%
•	Class Discussion and Reading Assignments	20%
•	Midterm Exam	30%
•	Final Exam	40%