

EECE377 Communication Systems

Spring 2012

- Time:** MWF 1:10-2:10 PM UU202
- Instructor:** Dr. X. Edward Li, Associate Professor
Office: ES 2321. Tel: 7-6048. Email: xli@binghamton.edu
Office Hours: Tuesday, Thursday 11:00-12:00 (or by appointment)
- TA: TBD
Office Hours of TA: TBD
- Textbook:** S. Haykin & M. Moher, *Communication Systems*, 5th Edition, John Wiley, 2009.
Class Notes, assignments, solutions, etc, are on Blackboard
- References:**
1. J. Proakis and M. Salehi, *Contemporary Communication Systems Using MATLAB*, Bookware Companion Series, PWS Publishing, 1998.
 2. W. Tomasi, *Electronic Communications Systems, Fundamentals Through Advanced*, 4th Edition, Prentice Hall, 2001.
- Prerequisite:** EECE 301 and ISE 261
- Objective:** To introduce the student to analog and digital modulation and demodulation: AM, FM, QAM, PSK, FSK, and some basic knowledge of electronic communication systems.
- Topics:**
1. Introduction (Chapter 1)
 2. Representation of signals and systems (Chapter 2)
 3. Amplitude modulation (Chapter 3)
 4. Angle modulation (Chapter 4)
 5. Probability theory and random process (Chapter 5)
 6. Noise in CW modulation systems (Chapter 6)
 7. Transition from analog to digital (Chapter 7)
 8. Basics of bandpass digital modulations (Chapter 9)
- Grading:**
- Attendance: 5%
 - Homework(about 7): 14%
 - Quizzes(3): 21%
 - Exam 1: 15%
 - Exam 2: 20%
 - Final Exam: 25%

This course is also offered under the articulation agreement between Binghamton University and SUNYIT. It is available to qualified students at Binghamton University via the distance learning system Enginet.