

**Instructor:** Prof. Mort Naraghi-Pour, 321 EE Building, Tel: 8-5551

**Email:** mort@ece.lsu.edu

**URL:** www.ece.lsu.edu/mort

**Office Hours:** Monday and Wednesday, 1:00-3:30 p.m.

**Topics:**

1. Review of probability and random processes (Chapter 2).
2. Characterization of communication systems and signals (Chapter 4)
3. Optimum receiver principles (Chapter 5)
4. Channel capacity of additive white Gaussian noise channel (Chapter 6, briefly)
5. Coded modulation systems (Chapter 8, partially)

**Background:** EE-4660 or equivalent is a prerequisite. The probability background should be at least at the level of EE4660. If you have any questions about this course, please contact the instructor.

**Text:** *Digital Communications*, Fourth additions, John Proakis, McGraw-Hill, 2001.

**References:**

1. *Principles of Communication Engineering*, Wozencraft and Jacobs.
2. *Digital Communication*, Lee and Messerschmitt.
3. *Introduction to Digital Communication*, Ziemer and Peterson.

**Grading Policy:**

Homeworks	15 %
Midterm I	25 %
Midterm II	25 %
Final Exam	35 %

Letter grading will be based on a curve with the average being a *B*.