

TE 3341 Probability, Statistics and Random Processes

SPRING 2000

Course Name and Number: TE 3341 - Probability, Statistics and Random Processes
Instructor: Prof. Murat Torlak
Instructor's Information: Suite 3.518, torlak@utdallas.edu
Class Time and Place: MW 3:30-4:45PM and EC 2.120
Course Web Site: www.utdallas.edu/~torlak/probability
Office Hours: T 2:00PM-4:00PM or by appointment
Grading: Weekly homework (or computer) assignments (15%),
Midterm I (20%), Midterm II (25%) Final (40%).

Homework Policy: Collaboration on solving the homework problems is encouraged. Turning in identical homework solutions, however, will be considered cheating. Late assignments will not be accepted.

Textbook:

- *Probability, Random Variables, and Random Signal Principles* by P. Z. Peebles (3rd Edition)

Reference Books:

- *Probability, Random Variables, and Stochastic Processes* by Athanasios Papulis
- *Probability and Random Processes for Electrical Engineering* by Alberto Leon-Garcia
- *Fundamentals of Applied Probability Theory* by A. Drake

Course Description: This course covers the principles of probability, random variables, and random signals useful in a diverse range of telecommunications engineering fields such as communications, signal processing, and networks. MATLAB will be used as a software tool for the computer projects.

Tentative Course Outline:

1. Probability (Chapter 1)
2. The Random Variable (Chapter 2)
3. Operations on One Random Variable (Chapter 3)
4. Multiple Random Variables (Chapter 4)
5. Operations on Multiple Random Variables (Chapter 5)
6. Random Processes (Chapter 6)

Academic Dishonesty: Please see the UTD Graduate catalog for policy on academic dishonesty. Giving or receiving aid on a graded assignment or test is considered cheating and will be harshly penalized.