

Statistical Methods ICourse Information

- Instructor: Wenxin Jiang, Ph.D.
Department of Statistics
2006 Sheridan Road
Room: 33
Phone: 467-4533
- Office Hours: Wednesday, 11:00 a.m. to 12:00 p.m.
Department Office
- Class Info: Tuesday and Thursday 12:00 p.m. to 1:20 p.m.
- Text: Mathematical Statistics and Data Analysis
by John A. Rice, 2nd edition, 1994, Brooks/Cole Pub Co.
- Objective: This course is for studying probability and mathematical statistics for undergraduate students with a calculus background. We will discuss sample spaces, probability measures, conditional probability, independence, random variables, distributions, expected values, limit theorems, survey sampling, and parameter estimation.
- There will be a sequel to this course where statistical inference is the main topic. This current one is for preparing the necessary tools from the probability side.
- Prerequisites: An introductory statistics course (e.g., Stat B02), calculus (e.g., Math B15).
- Evaluation: Homeworks, Midterm and Final
Midterm will be held in the first class of the 6th week. Final exam schedule is posted on Web. Check
<http://www.registrar.nwu.edu/registration/winterfinal.html>

Course Topics

- I. Probability and Random Variables (Weeks 1 to 2)
References: Rice Chapter 1, 2.
- II. Joint Distributions (Week 3)
References: Rice Chapter 3.
- III. Expected Values (Weeks 4)
References: Rice Chapter 4.
- IV. Limit Theorems (Weeks 5)
References: Rice Chapter 5.
- V. Survey Sampling (Weeks 6 to 7)
References: Rice Chapter 7.
- VI. Parameter Estimation (Weeks 8 to 9)
References: Rice Chapter 8.