

Youngstown State University
Department of Mathematics and Statistics

Course Outline for Statistics 6944

Course Title: Mathematical Statistics II

Course Credit: 3 s.h.

Text: Casella, Berger, “Statistical Inference” 2nd ed, 2002
Duxbury

Course Prereq: MATH/STAT 5843 or 6943; or consent of graduate coordinator.
Credit will not be given for both 5844 and 6944.

Course Description: A study of theories and properties of statistical hypothesis testing and estimation, including the maximum likelihood method, likelihood ratio tests, sufficiency, and related topics.

Course Objectives: The goals of the course include:

- Developing an understanding of the fundamental concepts and theories in probability and statistics and their applications.
- Developing the ability to read and understand advanced mathematical and statistical definitions, theorems and proofs
- Developing the ability to communicate in mathematics and statistics and produce written proofs and preparing for further studies in probability and statistics.

Course Assignments:

Chapter	Contents
6	Principles of Data Reduction
7	Point Estimation
8	Hypothesis Testing
9	Interval Estimation
10	Asymptotic Evaluations
11	Analysis of Variance and Regression
12	Regression Models

This course may include the use of statistical software such as R, SPSS, or EXCEL.

Students with Disabilities: In accordance with University procedure, if you have a documented disability and require accommodations to obtain equal access in this course, please contact the Office of Equal Opportunity and Disability Services at the beginning of the semester. Office of Disability Service is located in Wick House (330) 941-3370.

Theft or misuse of information technology (including the downloading of pornography or visiting pornographic web sites) is a violation of “The Code of Student Rights, Responsibilities, and Conduct.” Violating “The Code” will result in disciplinary action, which may include suspension or expulsion from the University.

Semester: Spring 2007

Last Day to Withdraw with a grade of “W”: Thursday, March 29, 2007, noon.