Tennessee Technological University
Mathematics Department

MATH 6270: Mathematical Statistics

I. COURSE DESCRIPTION FROM CATALOG:

Statistical hypothesis, uniform most powerful test, sufficient statistics, completeness, R

CHAPTER 9 Nonparametric Methods
9.1 Confidence Intervals for Distribution Qualities
9.2 Tolerance Limits for Distributions
9.3 The Sign Test
9.4 A Test of Wilcoxon
9.5 The Equality of Two Distributions
9.6 The Mann-Whitney-Wilcoxon Test
9.7 Distributions Under Alternative Hypotheses 9.8 Linear Rank statistics

CHAPTER 10 Sufficient Statistics
10.1 A Sufficient statistic for a Parameter
10.2 The Rao-Blackwell Theorem
10.3 Completeness and Uniqueness
10.4 The Exponential Class of Probability Density Functions
10.5 Functions of a Parameter
10.6 The Case of Several Parameters

CHAPTER 11 Further Topics in statistical Inference
11.1 The Rao-Cramer Inequality
11.2 The Sequential Probability Ration Test

VI. ADDITIONAL INFORMATION:

VII. POSSIBLE TEXTS AND REFERENCES:

Introduction to Mathematical Statistics, 6th edition, Hogg and Craig

VIII.