**Department: Statistics** 

Course No: STAT 230Q

Title: Introduction to Mathematical Statistics

Credits: 3

Contact : Dipak K. Dey

**WQ**: Q

**Catalog Copy**: Three credits. Prerequisite: MATH 210 or 220. Students may not receive credit for both STAT 230 and 315.

The mathematical theory underlying statistical methods. Probability spaces, distributions in one and several dimensions, generating functions, limit theorems, sampling, parameter estimation. Neyman-Pearson theory of hypothesis testing, correlation, regression, analysis of variance.

## **Course Information:**

A. This course teaches students mathematical statistics.

B. The students will be assigned weekly reading and problem sets from the text, and be given in-class midterm and an in-class final exam.

C. This course will cover material such as probability spaces, distributions in one and several dimensions, generating functions, and limit theorems.

**Q** Criteria: This is a calculus based course.

**Role of Grad Students**: Graduate assistants will offer tutoring and grade homework.