Statistics 6610
Applied Nonparametric Statistics
3 semester hour course

Prerequisite: Stat 6201 or Stat 5301 or Stat 529 or Stat 6302 or Stat 623 or equivalent.

Exclusions: Stat 661

Location: - - -


Conversion note: Converted from a 5 credit hour quarter course (Topics are unchanged)

TENTATIVE COURSE DESCRIPTION
Noncalculus treatment of nonparametric tests, confidence intervals, estimation; topics include one- and two-sample problems, one- and two-way analysis of variance, multiple comparisons, correlation.

TOPIC LIST
1 Foundational comparison of parametric and nonparametric approaches
2 Dichotomous data problem
3 General connection between confidence sets and hypothesis tests
4 General connection between point estimates and hypothesis tests
5 Sign test and associated interval and point estimates for one-sample data
6 Signed rank test, interval and point estimates for one-sample data
7 Asymptotic relative efficiency comparisons
8 Rank sum test, interval and point estimates for two-sample data
9 Kolmogorov-Smirnov two-sample test for general differences
10 One-Way Layout: tests and multiple comparison procedures
11 Two-Way Layout: tests and multiple comparison procedures
12 Kendall's tau procedures for independence of two random variables