A. Course Description

Credits: 4

Prerequisites: STAT 201 Statistics I or equivalent. Familiar with statistical software.

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

This course covers the fundamental to intermediate ideas of nonparametric statistical analysis. The course builds on the ideas of hypothesis testing learned in STAT201 (Statistics I). The focus is on learning new statistical skills and concepts for real-world applications. Students will use statistical software to do the analyses. Topics include nonparametric methods for paired data, Wilcoxon Rank-Sum Tests, Kruskal-Wallis Tests, goodness-of-fit tests, nonparametric linear correlation and regression. Completion of STAT201 (Statistics I) is a prerequisite for this course.

B. Course Effective Dates: 05/09/2011 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Communicate understanding of analysis results through clearly written conclusions summarizing the results of the statistical models when applied to specified data sets.
2. Demonstrate the ability to appropriately select among different nonparametric models for hypothesis testing, including assumptions about model data, in the context of answering questions about representative real-world problems.
3. Understand and learn to interpret a more general set of statistical models and hypothesis testing techniques (not covered in STAT 201 and built on understanding of hypothesis testing) such Wilcoxon Rank-Sum Tests, Kruskal-Wallis Tests, goodness-of-fit-tests, nonparametric linear correlation and regression, and nonparametric methods for paired data.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

None