A. Course Description

Credits: 4

Prerequisites: STAT 201 Statistics I or equivalent. The expectation is that students understand the basic hypothesis testing framework.

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

This course covers the fundamental to intermediate ideas of the statistical analysis of categorical data. 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 analysis of 2x2 tables, stratified categorical analyses, estimation of odds ratios, analysis of general two-way and three-way tables, probit analysis, and analysis of loglinear models. Completion of STAT201 (Statistics I) is a prerequisite.

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 categorical analysis models for hypothesis testing, including data production design, in the context of answering questions about representative real-world problems.
3. Understand and learn to interpret a more advanced set of statistical models and hypothesis testing techniques (than covered in STAT 201) such as the analysis of 2x2 table, stratified categorical analyses, estimation of odds ratios, analysis of general two- and three-way tables, probit analysis and analysis of loglinear models.
4. Understand statistical principles and methods for the analysis of categorical data.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

None