A. COURSE DESCRIPTION
 Credits: 3
 Lecture Hours/Week: *.*
 Lab Hours/Week: *.*
 OJT Hours/Week: *.*
 Prerequisites: None
 Corequisites: None
 MnTC Goals: None
 An examination in the concepts and application of advance spatial statistical methodologies. These
 include, kriging, spatial autocorrelation, spatial regression models, and cluster analysis. Prerequisites:
 STAT 2610 or PSY 3401 or BUAD 2231 and GEOG 3231.

B. COURSE EFFECTIVE DATES: 08/25/2014 - Present

C. OUTLINE OF MAJOR CONTENT AREAS
 1. Analysis of Variance
 2. Data Transformation
 3. Descriptive Spatial Statistics
 4. Descriptive Statistics (Central Tendency, Measures of Dispersion)
 5. Inferential Statistics
 6. Multiple Sample Difference Tests
 7. Non-parametric Statistics
 8. Probability Mapping
 9. Probability
 10. Quantitative Approach in Geog.
 11. Spatial Data
 12. Spatial Patterns
 13. Spatial Relationship: Correlation and Regression
 14. Spatial Relationship: Multiple Regression

D. LEARNING OUTCOMES (General)
 1. Become comfortable using statistical packages like Minitab, SPSS, and R.
 2. Provide students with a strong background in advanced spatial analysis
 3. To introduce students to the basic analytical frameworks of point pattern, lattice, and geostatistical
    analysis.
 4. Learn about various spatial applications of regression models.
 5. Understand spatial autocorrelation and how it both limits and enhances spatial models
 6. Become familiar with the process of Kriging and other spatial interpolation methods.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
 None
F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted