A. Course Description

Credits: 4

Prerequisites:
ICS 352 Machine Learning AND
MIS 380 Business Intelligence and Analytics AND
STAT 301 Analysis of Variance and Multivariate Analysis AND
STAT 311 Regression Analysis

OR

MIS 480 Predictive Analytics

Lab Hours/ Weeks:
Corequisites: None

Lecture Hours/ Week:

MnTC Goals: None

This course provides a culminating experience in formulating and resolving data science and business analytics questions, regardless of domain or nature of scientific inquiry. Students work in teams on two comprehensive projects of increasing complexity to apply data science concepts and principles. They design and propose projects, source datasets to create appropriate data models and advanced visualizations, and produce professional reports and presentations based on insightful analysis and investigation.

B. Course Effective Dates: 12/17/2018 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Formulate and resolve deep and impactful questions to scientifically explore chosen project areas, in consultation with subject matter experts as appropriate.
2. Discover, source, and assimilate appropriate data sources, especially employing creative approaches to linking data from diverse sources following ethical guidelines.
3. Conduct appropriate data analyses without bias.
4. Refine and enhance teamwork and communication skills to produce professional presentations.
5. Discuss and report implications of professional work as a data scientist.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

None