# Minnesota State University Moorhead

# **MGMT 371: Introduction to Business Analytics**

## A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

#### Prerequisites:

This course requires both of these prerequisite categories

- 1. MATH 234 Introduction to Probability and Statistics
  - And
- 2. MGMT 260 Principles of Management

Corequisites: None

MnTC Goals: None

Business analytics refers to techniques used by enterprises to gain insights and make better decisions using data. It has applications in all the functional areas of an enterprise including accounting, finance, marketing, operations and strategic planning. This class is made up of three parts: i) descriptive analytics to focus on analysis of historical data; ii) predictive analytics to focus on data mining and forecasting to develop insights; and iii) prescriptive analytics to focus on optimization and simulation to select from business alternatives under constraints.

### B. COURSE EFFECTIVE DATES: 02/02/2018 - Present

#### C. OUTLINE OF MAJOR CONTENT AREAS

- 1. Introduction to decision making and business analytics in practice
- 2. Data visualization
- 3. Decision analysis
- 4. Descriptive Data Mining
- 5. Descriptive statistics
- 6. Introduction to optimization models
- 7. Predictive data mining
- 8. Random variables and probability in modeling uncertainty
- 9. Regression models
- 10. Statistical inference
- 11. Time series analysis

## **D. LEARNING OUTCOMES (General)**

- 1. Analyze data to gain insights.
- 2. Construct and evaluate various mathematical models and apply them to business scenarios.
- 3. Distinguish between different stages of analytics and when they can be used in business scenarios.

## E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

## F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted