

# North Hennepin Community College

## DSCI 2001: Data Science I

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 4

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:

This course requires the following prerequisite

MATH 1210 - Applied Statistics

Corequisites: None

MnTC Goals: None

This course introduces students to the rapidly growing field of Data Science. Students will learn the concepts and tools used to analyze data sets and make informed business and/or research decisions. Students will use various software, including databases, to gather, organize and visualize data for analysis.

**B. COURSE EFFECTIVE DATES:** 06/03/2019 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. After successfully completing this course, a student will be able to:

### D. LEARNING OUTCOMES (General)

1. Develop a strong foundation of syntax, variables and data types crucial to statistical modeling (ELO 1, 2)
2. Import data from varied sources (databases, text-files, spreadsheets) (ELO 1, 2)
3. Build data structures to perform calculations based on real-world applications. (ELO 1,2)
4. Select and test variables and models for prediction using statistical packages. (ELO 1, 2)
5. Discuss model selection based on data types (I.e. discrete vs continuous) and setting (i.e. field of research and specific requirements). (ELO 1, 2)
6. Develop varied graphical displays relevant to a given application. (ELO 1, 2)
7. Create audience-appropriate communication to convey relevant information about the process and results of a data analysis project to empirically support business decisions and/or scientific research. (ELO 1, 2, 4)

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted