North Hennepin Community College

DSCI 2002: Data Science II

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 4

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:
DSCI 2001 - Data Science I

Corequisites: None

MnTC Goals: None

Provide students further exposure to the growing field of Data Science. Building upon the topics in Data Science I, students will learn about machine learning techniques, ways to deal with networked systems and extremely large data sets, and methods for improving the performance of computerized statistical models.

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. Properly assess and apply machine learning techniques (ELO 1, 2, 4)
2. Understand the role of networked systems and their topologies for data analysis. (ELO 1, 2, 4)
3. Determine appropriate resource allocations for solving data oriented problems to improve model performance. (ELO 1, 2)
4. Apply methods of data preparation such as parsing and normalization. (ELO 1, 2)
5. Prepare and Clean data for use in Machine Learning Models. (ELO 1, 2)
6. Develop Classification, Clustering, and Regression models. (ELO 1, 2, 4)
7. Evaluate models using large data sets and model evaluation. (ELO 1, 2, 4)
8. Discuss Third-Party solutions for Supervised/Unsupervised models. (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