

# North Hennepin Community College

## BUS 2100: Business Statistics

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites:

This course requires any of these eight prerequisites

Placement into MATH 0970/1010/1031/1130/1140

Algebra College Level

Placement into MATH 1150

MATH 0900 - Mathematical Literacy (Minimum grade: 1.67 GPA Equivalent)

MATH 0970 - Bridge to College Algebra (Minimum grade: 1.67 GPA Equivalent)

MATH 0980 - Pre College Algebra (Minimum grade: 1.67 GPA Equivalent)

MATH 1130 - Elementary Statistics (Minimum grade: 1.67 GPA Equivalent)

MATH 1150 - College Algebra (Minimum grade: 1.67 GPA Equivalent)

Corequisites: None

MnTC Goals: None

This course is designed primarily for the business major. This course will introduce you to business statistics, or the application of statistics in the workplace. In this course, you will learn how to apply statistical tools to analyze data, draw conclusions, and make predictions of the future. The course will begin with data distributions, followed by probability analysis, sampling, and finally hypothesis testing. This course is mathematically intensive, and much of what you learn here will deal with things you encounter every day. This course also makes use of spreadsheets, an important tool for working with and making sense of numerical data.

**B. COURSE EFFECTIVE DATES:** 01/30/2017 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. This course is needed for the completion of the Business Administration AS Degree

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

1. Analyze the purposes for descriptive statistics and the purposes of inferential statistics (ELO 1, 2)
2. Understand the assumptions underlying discrete versus continuous variables (ELO 1, 2)
3. Understand the difference underlying nominal, ordinal, interval, and ratio levels of measurement (ELO 1, 2)
4. Apply measures of central tendency and dispersion (ELO 1, 2, 4)
5. Apply measures of skew, coefficient of variation (ELO 1,2,4)
6. Apply measures of correlation coefficients (ELO 1,2,4)
7. Understand proper/ethical random sampling methodology, margin of error, and item analysis using Cronbach Alpha (ELO 1, 2,3)
8. Analyze qualitative variables with frequency tables and graphical charts (ELO 1, 2)
9. Analyze quantitative variables with frequency distributions and graphical charts (ELO 1, 2)
10. Analyze using linear regression and bivariate correlational concepts, including regression analysis (ELO 1, 2)
11. Analyze using empirical and subjective probability concepts (ELO 1, 2)
12. Analyze using concepts from discrete and continuous probability distributions (ELO 1, 2)
13. Apply the central limit theorem (ELO 1, 2, 4)
14. Apply confidence intervals for population proportions and population means (ELO 1, 2, 4)
15. Apply a one sample test of hypothesis for a population mean (ELO 1, 2, 4)
16. Apply a two sample test of hypothesis for a population mean (ELO 1, 2, 4)
17. Perform situation analysis, forecasting, and decision making within the business construct (ELO 1,2,4)
18. Understand how to become a better consumer of data for personal and professional decision making (ELO 3)

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

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

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

None noted