A. Course Description

Credits: 4

Prerequisites:

MATH 098 Introduction to Mathematical Thinking
OR
MATH 099 Developmental Mathematics Using Web-Based Technology
OR
MATH 102 Mathematics of Sustainability
OR
MATH 115 College Algebra
OR
MATH 120 Pre-calculus
OR
MATH 210 Calculus I
OR
MATH 211 Calculus II
OR
MATH 215 Discrete Mathematics
OR
MATH 310 Calculus III: Multivariable Calculus

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: Goal 04 - Mathematical/Logical Reasoning

This course covers the basic principles and methods of statistics. It emphasizes techniques and applications in real-world problem solving and decision making. Topics include frequency distributions, measures of location and variation, probability, sampling, design of experiments, sampling distributions, interval estimation, hypothesis testing, correlation and regression.

B. Course Effective Dates: 08/01/1998 - 09/05/1999 09/06/1999 - 08/14/2010 08/15/2010 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)
1. Demonstrate comprehension and ability to apply inferential statistics, including construction of confidence intervals for point estimates and simple hypothesis tests.
2. Recognize appropriate use of different statistical models to represent and answer questions about representative real-world problems involving categorical and quantitative data.
3. Understand and apply statistical concepts including probability, regression and correlation, experimental design, descriptive statistics and inferential statistics.
4. Understand statistical principles and methods for data collection and analysis.

E. Learning Outcomes (MN Transfer Curriculum)

Goal 04 - Mathematical/Logical Reasoning

1. Apply higher-order problem-solving and/or modeling strategies.
2. Clearly express mathematical/logical ideas in writing.
3. Illustrate historical and contemporary applications of mathematical/logical systems.

G. Special Information

Prerequisites: A grade of C- or higher in MATH 98 or MATH 102, or placement at MATH 115 College Algebra on the mathematics assessment test offered by Placement Assessment Office. For information on math placement and assessment visit, www.metrostate.edu/placement-assessment. Students whose prerequisites are not identified by the system would contact the Math and Statistics Department for an override at MATH@metrostate.edu. First day attendance required except by instructor permission.