## Minnesota State University Moorhead

# **MATH 134: Applied Statistics**

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:

This course requires any of these three prerequisites MATH 090 - Elementary Algebra MATH 090A - Elementary Algebra MSUM MATH 99 and 110 and 134

Corequisites: None

MnTC Goals: Goal 04 - Mathematical/Logical Reasoning

Frequency distributions, introduction to probability, normal distribution, central limit theorem, estimation, tests of hypotheses, non-parametric techniques, design of experiments, one-way and two-way analysis of variance, and simple linear regression. MnTC Goal 4

### B. COURSE EFFECTIVE DATES: 02/02/2019 - Present

#### C. OUTLINE OF MAJOR CONTENT AREAS

1. Frequency distributions, introduction to probability, normal distribution, central limit theorem, estimation, tests of hypotheses, non-parametric techniques, design of experiments, one-way and two-way analysis of variance, and simple linear regression

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

- 1. Use a variety of statistical methods to analyze data.
- 2. Understand the requirements of a statistical test, and know when it is applicable.
- 3. Understand what statistical analyses can and cannot tell the researcher about the data.

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

Goal 04 - Mathematical/Logical Reasoning

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

#### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

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

None noted