

Bemidji State University

STAT 2610: Applied Statistics

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 04 - Mathematical/Logical Reasoning

A nontheoretical introduction to statistics with an emphasis on applications in a variety of disciplines. Topics include measures of central tendency, position and dispersion; basic probability; hypothesis testing; estimation; analysis of variance; linear correlation and regression; nonparametric statistics. Prerequisite: Three years of high school mathematics (including two years of algebra) and an appropriate score on the Mathematics Placement Test, or completion of MATH 1170 or higher. Liberal Education Goal Area 4.

B. COURSE EFFECTIVE DATES: 06/02/2008 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Introduction to understanding basic statistics and statistical procedures in real-life problems
2. The Nature of Statistics
3. Chi-Square Procedures
4. Confidence Intervals
5. Descriptive Measures
6. Discrete Random Variables
7. Inferences for Population Proportions
8. Probability Concepts
9. The Normal Distribution

D. LEARNING OUTCOMES (General)

1. learn and understand basic statistical concepts and techniques in every-day problems.
2. conduct basic statistical inference.
3. learn how to investigate through data; devise a plan to collect data; and systematically collect, record and organize data.
4. predict outcomes based on exploring probability through collecting data and experiments.
5. analyze and interpret data, make and evaluate arguments, predictions, recommendation, or decisions based on an analysis of 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. Explain what constitutes a valid mathematical/logical argument(proof).
4. Apply higher-order problem-solving and/or modeling strategies.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted