Bemidji State University

STAT 3650: Probability and Statistics for Secondary Teachers

A. COURSE DESCRIPTION
   Credits: 4
   Lecture Hours/Week: *. *
   Lab Hours/Week: *. *
   OJT Hours/Week: *. *
   Prerequisites: None
   Corequisites: None
   MnTC Goals: None
   Topics include descriptive statistics and graphical representations, basic probability and commonly
   encountered distributions, random variables, expectation and variance, sampling theory, and inferential
   statistics including univariate and bivariate data. Calculus is employed in the development of these
   concepts. Technology is used extensively to motivate and explain concepts and techniques. The course
   emphasizes and models exercises and pedagogy appropriate for the secondary school classroom.
   Prerequisite: MATH 2471.

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

C. OUTLINE OF MAJOR CONTENT AREAS
   1. Basic probability and commonly encountered distributions
   2. Descriptive statistics and graphical representations
   3. Expectation and variance
   4. Inferential statistics including univariate and bivariate data
   5. Random variables
   6. Sampling theory

D. LEARNING OUTCOMES (General)
   1. Participate in designing, executing, and analyzing the results of an experiment
   2. Create lesson plans appropriate for a grade level 9-12 class and relevant to content covered in this
      course

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted