MATH1112 - Applied Statistics

Credits:	3 (3/0/0)
Description:	Meets MnTC Goal Areas 2 and 4. This course focuses on the principles and applications of statistics and data analysis with an emphasis on inference. Students acquire a solid foundation in the basics of statistics and its application in solving practical problems. This course uses examples from various disciplines to illustrate the relevancy of statistics in real-world situations. Topics include frequency distributions, introduction to probability, normal distribution, central limit theorem, design of experiments, estimation, simple linear regression and hypothesis testing.
Prerequisites:	• MATH1020 OR • Placement Exam
Corequisites:	• MATH0097
Pre/Corequisites*:	
Competencies:	1. Classify data by level of measurement. 2. Demonstrate knowledge of sampling techniques. 3. Organize and represent data using frequency distributions. 4. Organize and represent data using graphs. 5. Compute measures of central tendency and variation. 6. Perform a linear correlation and regression analysis. 7. Analyze the characteristics of a normal distribution, including the central limit theorem. 8. Find the probability of an event using probability properties and counting techniques. 9. Estimate population parameters using confidence intervals. 10. Perform hypothesis testing and interpret the results.
MnTC goal areas:	2. Critical Thinking 4. Mathematics/Logical Reasoning

Can be taking as a Prerequisite or Corequisite.