

## 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:	<ol> <li>Classify data by level of measurement.</li> <li>Demonstrate knowledge of sampling techniques.</li> <li>Organize and represent data using frequency distributions.</li> <li>Organize and represent data using graphs.</li> <li>Compute measures of central tendency and variation.</li> <li>Perform a linear correlation and regression analysis.</li> <li>Analyze the characteristics of a normal distribution, including the central limit theorem.</li> <li>Find the probability of an event using probability properties and counting techniques.</li> <li>Estimate population parameters using confidence intervals.</li> <li>Perform hypothesis testing and interpret the results.</li> </ol>
MnTC goal areas:	Critical Thinking     Mathematics/Logical Reasoning

<sup>\*</sup>Can be taking as a Prerequisite or Corequisite.