

Course Outcome Summary

Standard Course

MATH 162 Introduction to Statistics

Course Information

Division	Science Mathematics
Contact Hours	60
Total Credits	4

Prerequisites

RDG 090, ENGL 090 and a grade of C or better in MATH 105 or MATH 124 or MATH 151 within the last three years is highly recommended, or qualifying scores on accepted placement tests.

Course Description

An introductory course to acquaint the student with the theory and application of statistical methods that are used in business, health care, and the natural and social sciences. Topics include graphical representations of data, measures of central tendency, probability and probability distributions, sampling distributions, correlation and regression, inferences for categorical and quantitative data, confidence intervals and hypothesis testing. Emphasis is on interpretation and evaluation of statistical results. Students will be expected to demonstrate the ability to work with mathematics numerically, graphically, analytically and verbally. Calculators and statistical software will be utilized.

Course Outcomes

In order to evidence success in this course, students will be able to:

1. Represent data using tables and graphs.
2. Calculate measures of central tendency and probabilities for sampling distributions.
3. Calculate correlation coefficients and use linear regression to make predictions.
4. Construct confidence intervals.
5. Perform hypothesis testing for one- and two-sample data.
6. Correctly interpret results of descriptive and inferential statistical analyses.

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