FLCC Course Syllabus

General Information

Date
03/23/2017

Department
Mathematics

Course Prefix:
MAT

Course Number:
200

Course Title:
Statistics

Course Information

Credit Hours
3

Lecture Contact Hours
3

Catalog Description
This statistics course is designed for an experienced mathematics student. It is a one semester course covering descriptive and inferential statistics. Topics included are measures of center; measures of dispersion; hypothesis testing; estimations for population means, proportions, and variance; determination of sample size; uses of the Chi-square distribution; analysis of variance; linear correlation and linear regression; and statistical research. The course will emphasize computer or calculator use (graphing calculator, Minitab, Excel, StatCrunch, etc.) to obtain results.

Prerequisites
MAT 145 (College Algebra) or Placement into Math Level 3 or higher

Grading Scheme
Letter Grade

This course is designated as satisfying a requirement in the following SUNY Gen Ed category
Mathematics

FLCC Values

College Learning Outcomes Addressed by the Course

Inquiry
Interconnectedness
Perseverance

Course Learning Outcomes
Course Learning Outcomes

1: Use the language of statistics; read and interpret statistical presentations; critically analyze the use of statistics in decision making; understand and recognize the misuses and limitations of statistics.
2: Describe the relationship between sample statistics and population parameters.
3: Analyze bivariate data using linear correlation and regression using technology.
4: Make applicable predictions using linear regression analysis.
5: Apply probability distributions to applied problems with an emphasis on the binomial and normal distributions.
6: Explain how the Central Limit Theorem applies to statistical analysis.
7: Determine the validity about the population parameter using the technique of hypothesis testing.
8: Apply hypothesis testing to small samples, large samples, two samples, and many samples.
9: Find and interpret the meaning of confidence intervals for many different sample situations.
10: Evaluate statistical results for reasonableness

Program Affiliation

This course is required as a core program course in the following program(s)

AS Business Administration

Outline of Topics Covered

Outline of Topics Covered in Course

MAT_200_Topic_Outline.pdf