

## CUMBERLAND COUNTY COLLEGE

**Course:** MA 206 Statistics II

**Credits:** 3

**Prerequisites:**

MA 205

**Course Description**

Provides additional research tools and techniques. Topics include testing the difference between means, variances, and proportions; f-test; chi-squared test; ANOVA; linear and multiple regression; correlation; and non parametric tests. Statistical tests will be presented in the context of basic research techniques.

**Learning Outcomes**

At the completion of this course, students will be able to:

- Demonstrate an understanding of the basic concepts of statistical research;
- Discuss the techniques of hypothesis testing;
- Design an acceptable research project and report the results in written form;
- Demonstrate an understanding of a variety of parametric statistical tests; Demonstrate an understanding of a variety of non-parametric statistical tests;
- Demonstrate the use of a computer in statistical research.

**Topical Outline**

- Statistical Software
- Sampling, Estimation Fundamentals of Research
- Hypothesis Testing Procedures
- Tests Concerning Means and Proportions
- Tests Concerning Variance and Standard Deviation
- Tests Concerning Normal Data
- Correlation and Regression
- Tests Concerning Two of More Means - the ANOVA Test
- Non-Parametric Tests
- Student Research Project

**Required Texts and Other Materials**

Introductory Statistics by Weiss: Addison Wesley.

**Student Assessment**

(Assessment may be accomplished through projects, portfolios, exams, presentations and/or papers)

### **Academic Integrity**

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation. Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense. As such, a plagiarized paper or report automatically receives a grade of ZERO and the student may receive a grade of F for the semester at the discretion of the instructor.

### **Available Resources**

If you are having difficulty with work in this class, tutoring is available through the Success Center. If you think that you might have a learning disability, contact Project Assist at 856.691.8600, x1282 for information on assistance that can be provided to eligible students.

**(List availability of open labs and/or writing center)**

### **Before Withdrawing From This Course**

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.