Administrative Unit: History and Social Sciences Department

Course Prefix and Number: SOCI 324

Course Title: Statistics for the Behavioral Sciences

Number of Credit Hours: 3 Lecture Hours: 3 Laboratory Hours: 0

Catalog Description: The study of parametric and nonparametric statistics commonly used in the behavioral and life sciences. Included is analyses of relationship and variance, as well as effect sizes associated with each. Students majoring in Biology must earn a grade of C or better. Prerequisite: MATH 150 College Algebra. Cross-listed as PSYC 324.

Prerequisite(s)/Corequisite(s): MATH 150 College Algebra.

Text(s): Most current editions of the following:


Diekhoff, G.M. Basic Standards for the Social and Behavioral Sciences. Prentice Hall.


Howell, D.C. Statistical Methods for Psychology. PWS Kent.


Course Objectives:

• To choose the appropriate parametric and nonparametric statistical tests.
• To calculate results (including those for effect size).
• To interpret results.

Measurable Learning Outcomes:

• Correctly choose the appropriate statistical test for a given set of data
• Compute basic descriptive statistics
• Compute basic parametric and nonparametric
statistics
  • Interpret the results of statistical analyses
  • Use a scientific calculator and a packaged computer program (e.g. Statistica, SAS, SPSS, etc.) to compute statistics

Topical Outline (major areas of coverage):
  • Scientific methods
  • The role of statistics in the study of behavior
  • Theoretical underpinnings of parametric and nonparametric statistics
  • Parametric analyses
  • Nonparametric analyses
  • Selecting the correct statistical analysis
  • Computation of parametric and nonparametric analyses
  • Interpreting statistical results

Recommended maximum class size for this course: 15

Library Resources: Online databases are available at http://www.ccis.edu/offices/library/resources.asp. You may access them from off-campus using your eServices login and password when prompted.

Prepared by: Cheryl Hardy, Ph.D.

Date: March 23, 2006

NOTE: The intention of the master syllabus is to provide an outline of the contents of this course, as specified by the faculty of Columbia College, regardless of who teaches the course, when it is taught or where it is taught. Faculty members teaching this course for Columbia College are expected to facilitate learning pursuant to the course objectives and cover the subjects listed in the topical outline. However, instructors are also encouraged to cover additional topics of interest so long as those topics are relevant to the course’s subject. The master syllabus is, therefore, prescriptive in nature but also allows for a diversity of individual approaches to course material.

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