

# SYLLABUS

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**Code:** PSYC 246

**Title:** Introduction to Quantitative Methods in  
Social Sciences Laboratory

**Institute:** Social Sciences and Education

**Department:** Psychology

**Course Description:** This laboratory course in quantitative methods is designed to develop student skills by providing additional opportunities to engage in data analytic techniques. Statistical operations learned in Introduction to Quantitative Methods in Social Science Research are placed in a real life context; students will learn to apply empirical methods to solve problems in a variety of industrial, educational and managerial situations. As such, this laboratory course focuses on the application of descriptive and inferential statistical procedures to quantitative methodologies (e.g. T-test and ANOVA) using statistical software (e.g. SPSS and MS Excel).

**Prerequisites:** MATH 021 or completion of College's foundational studies requirement in algebra and at least one of the following courses with a grade of "C" or better: PSYC 105, PSYC 106, SOCI 101, CRJU 101 or POLI 101.

**Corequisites:**

**Prerequisites or Corequisites:** PSYC 245

**Credits:** 1

**Lecture Hours:** 0

**Lab/Studio Hours:** 2

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**REQUIRED TEXTBOOK/MATERIALS:** KIRKPATRICK, L.A. & FEENEY, B.C. (2007). *A SIMPLE GUIDE TO SPSS, VERSION 14.0, 8<sup>TH</sup> ED.* WADSWORTH.

AND/OR

ROSENBERG, K.M. (2007). *THE EXCEL STATISTICS COMPANION CD-ROM AND MANUAL, VERSION 2.0, 2<sup>ND</sup> ED.* WADSWORTH.

*NOTE: ADDITIONAL READINGS ARE AT THE DISCRETION OF THE INSTRUCTOR*

**ADDITIONAL TIME REQUIREMENTS:**

**COURSE LEARNING OUTCOMES:**

Upon completion of this course, students will be able to:

The student will receive instruction in and be able to use computer systems and statistical software packages [Technological Literacy]. The student will be able to identify a need for information and collect, analyze, organize, and evaluate information from a variety of sources; synthesizing, documenting and presenting research data [Information Literacy]. The student will learn to apply descriptive and inferential statistical procedures to analyze and solve research questions using quantitative methods [Mathematical/Scientific Reasoning].

**GRADING STANDARD:**

A = 93-100  
A- = 90-92  
B+ = 86-89  
B = 83-85

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B- = 79-82

C+ = 77-78

C = 70-76

D = 65-69

F = <65

INC = 70% of Assignments completed for consideration of an incomplete

There will be exam practical, written assignments and group work. Details vary from instructor to instructor. Re-testing is at the discretion of the instructor. Individual Instructor addendums are available from the Learning Assistants in the Psychology Department (Located in MAN 127).

## **COURSE CONTENT:**

Week 1: Overview of computer systems and statistical software packages and their application to the social sciences

Week 2: Bankier Library Workshop: How to Find Psychology Articles (from Topic to Full Text) and identification of two empirical articles for student analysis and presentation.

Week 3: Basic computer system and peripheral processes: mouse/keyboard processing, often-used dialogue boxes, editing output, printing results, and the "Options" Option; Creating and editing a data files using statistical software packages; choose research study design and topic

Week 4: Topics in Data Management (e.g., selecting cases, recoding variables) and student collection of data for study

Week 5: Creating and editing graphs and charts in statistical software packages; Frequencies information with statistical software packages (frequencies, bar charts, histograms, percentiles)" and continue working on data collection for study and choosing appropriate data

Week 6: Descriptive Statistics (measures of central tendency and variability) and The MEANS procedure – application of statistical techniques towards student collected data

Week 7: Finding Correlations with statistical software packages and application towards student collected data, if appropriate

Week 8: The T-TEST Procedure in statistical software packages: independent samples and application towards student collected data, if appropriate

Week 9: The T-TEST Procedure in statistical software packages: paired- samples and related samples and application towards student collected data, if appropriate

Week 10: The One-Way ANOVA Procedure in statistical software packages and application towards student collected data, if appropriate

Week 11: The related measures One-Way ANOVA Procedure in statistical procedures and application towards student collected data, if appropriate

Week 12: General Linear Models: Two-Way ANOVA with statistical software packages and application towards student collected data, if appropriate

Week 13: General Linear Models: Two-Way ANOVA with statistical software packages and application towards student collected data, if appropriate - continued.

Week 14: Presentation of their study to the class and submission to undergraduate conference

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Week 15: Presentation of their study to the class and submission to undergraduate conference - continued.

## **DEPARTMENT POLICIES:**

- Attendance is expected and contributes significantly to performance in this course.
- You are responsible for any work done in lab that you miss – you should contact your laboratory instructor for the work prior to the next meeting.
- Laboratory will begin and end on time. Lateness or early departure is not acceptable behavior, nor is walking in and out of the classroom during class time. Instructors may penalize such activities.
- Instructors may set a limit on the number of absences allowed. Individual instructor addendums detailing specific attendance policies are to be obtained through the psychology department (MAN 127).
- **During laboratory**, periods of exercise explanation, and when fellow students are speaking to the class, students are expected to use proper courtesy and refrain from using technologies.
- **ALL Cell Phones and Beepers** must be turned **OFF** during class time.
- Students are not permitted to use CD players or computers, etc... to play music during class time.
- The use of **IRC, AIM** and other instant messaging (chat) programs are not permitted during a class.
- **E-mail** must be professional and well written. As this is a college-level course it is expected that text messages are concise and prepared in full sentence form.
- Any e-mail that does not fully disclose the name of the student will be automatically interpreted as **SPAM** (unwanted junk mail) and be **deleted unopened**.
- Copying and pasting from the internet without a reference as well as purchasing materials online and misrepresenting them as your own work is considered **plagiarism** and is contrary to the BCC student conduct code.

## **COLLEGE POLICIES:**

For information regarding:

- ◆ Brookdale's Academic Integrity Code
- ◆ Student Conduct Code
- ◆ Student Grade Appeal Process

Please refer to the [BCC STUDENT HANDBOOK AND BCC CATALOG](#).

## **NOTIFICATION FOR STUDENTS WITH DISABILITIES:**

Brookdale Community College offers reasonable accommodations and/or services to persons with disabilities. Students with disabilities who wish to self-identify must contact the Disabilities Services Office at 732-224-2730 (voice) or 732-842-4211 (TTY) to provide appropriate documentation of the disability, and request specific accommodations or services. If a student qualifies, reasonable accommodations and/or services, which are appropriate for the college level and are recommended in the documentation, can be approved.

## **ADDITIONAL SUPPORT/LABS:**

*The syllabus is intended to give student guidance in what may be covered during the semester and will be followed as closely as possible. However, the faculty member reserves the right to modify, supplement, and make changes as the need arises.*