SYLLABUS

**Code**: PSYC 247  
**Title**: Quantitative Methods in Psychology  

**Institute**: Business and Social Science  
**Department**: Psychology

**Course Description**: Quantitative methods used in psychological research: descriptive and inferential statistics. In this course, methods are situated within the design and interpretation of experimental data. Includes such methods as z-tests, correlation and regression, t-tests (single sample, dependent and independent means), and ANOVA (single and two-factor) and their application with statistical software.

**Prerequisites**: MATH 021 or satisfactory completion of the College’s foundational studies requirement in algebra and at least a “C” of better in PSYC 105 or PSYC 106

**Corequisites**: N/A

**Prerequisites or Corequisites**: N/A

**Credits**: 4  
**Lecture Hours**: 4  
**Lab/Studio Hours**:

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**REQUIRED TEXTBOOK/MATERIALS:**

Textbook requirement to be determined by instructor - individual instructor addendums detailing the required texts may be obtained by contacting the respective Psychology faculty (offices located in MAN 127).

**ADDITIONAL TIME REQUIREMENTS:**

(Identify open lab or other activities that are required)

Completion of reading and homework assignments is expected each week, as assigned by the Instructor.

**COURSE LEARNING OUTCOMES:**

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

- Apply and calculate quantitative methods (e.g. z-tests, correlation, regression, t-tests (single sample, dependent and independent means), and/or ANOVA (single and two-factor) for the appropriate design and interpretation of experimental data
- Demonstrate the use of statistical software (e.g. SPSS) in the application of quantitative methods in context to the appropriate design and interpretation of experimental data
- Critically evaluate, analyze and synthesize research, in relation to the design and interpretation of experimental data via written research in APA format

**GRADING STANDARD:**

100-93% = A  
92-90% = A-  
89-87% = B+  
86-83% = B  
82-80% = B-  
79-77% = C+
There will be exams, statistical software practicum, and written/research and quantitative assignments. Details vary from instructor to instructor. Individual Instructor Addendums are available by contacting the respective faculty person (offices located in MAN 127).

**COURSE CONTENT:**

All quantitative methods will be calculated manually and with statistical software. Concepts, logic and manual calculations will be assessed in unit examinations. Proficiency with statistical software, for all quantitative methods covered, will be assessed via a summative practicum.

Please note your individual Instructor may choose to vary the order of topics presented below.

- Introduction to the Philosophy of Science and Research Methods
- Displaying Data Using Tables and Graphs
- Measures of Central Tendency, Variability, and Z Scores
- Correlation and Regression
- Key Ingredients for Inferential Statistics (Normal Curve, Sample versus Population and Probability)
- Introduction to Hypothesis Testing
- Hypothesis Testing with Means of Samples (Z Test)
- Making Sense of Statistically Significance: Effect Size and Statistical Power
- Introduction to the t Test: Single Sample and Dependent Means
- The t Test for Dependent Means
- Analysis of Variance (Single-and Two-Factor)

**DEPARTMENT POLICIES:**

- Attendance is expected and contributes significantly to performance in this course.
- You are responsible for any work done in class that you miss.
- Class 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 by contacting the respective faculty member (office located in MAN 127).
- During lecture, periods of class 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, Tablets and Computers** 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 instant messaging and social media 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 Instructor addendum will be distributed on the first day of class. This addendum will contain specific information about instructor information (hours, office, phone, and email), the class schedule, required assignments, and individual instructor class policies.

Additional tutoring may be available – contact your instructor for more information regarding tutoring times and locations.