COURSE SYLLABUS

LAST REVIEW   **Spring 2021**

COURSE TITLE   **Statistics in Social Science Research**

COURSE NUMBER   **PSYC 0205**

DIVISION   **Social & Behavioral Sciences and Public Services**

DEPARTMENT   **Psychology**

CIP CODE   **24.0101**

CREDIT HOURS   **3**

CONTACT HOURS/WEEK   **Class: 3**

PREREQUISITES   PSYC0101 and MATH 105 or higher

COURSE PLACEMENT   Students must meet the correct placement measure for this course. Information may be found at: https://www.kckcc.edu/admissions/information/mandatory-evaluation-placement.html

COURSE DESCRIPTION

This course introduces the use of statistical principles and techniques as they relate to analysis and interpretation of psychological data. A wide range of statistical methods are used to analyze data informing the student of how to apply the proper statistical methods to data examples. Descriptive and inferential statistical methods with parametric and nonparametric statistical tools are studied. The course emphasis is to become more knowledgeable of behavioral research through understanding of statistical methods used both in research and in everyday life.

General Education Learning Outcome

☐ Basic Skills for Communication
☐ Mathematics
☐ Humanities
☐ Natural and Physical Sciences
☒ Social and Behavioral Sciences

Institutional Learning Outcomes

☒ Communication
☒ Computation and Financial Literacy
☒ Critical Reasoning
☐ Technology and Information Literacy
☐ Community and Civic Responsibility
☐ Personal and Interpersonal Skills

TEXTBOOKS
http://kckccbookstore.com/

METHODS OF INSTRUCTION
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:
I.   General Introduction to Statistics and Research Design
II.   Frequency Distributions
III.   Visual Displays of Data
IV.   Central Tendency and Variability
V.   Sampling and Probability
VI.   The Normal Curve, Standardization, and z-scores
VII. Hypothesis Testing with z Tests
VIII.   Confidence Intervals, Effect Size, and Statistical Power
IX.   The Single-Sample, Paired-Samples, and Independent-Samples t Test
X.   One-Way ANOVA and Two-Way ANOVA
XI.   Correlation and Linear Regression
XII. Nonparametric Tests

COURSE OUTCOMES:
1.   The student will be able to describe the scientific process and be able to identify and assess the value of statistical methods.
2.   The student will be able to apply the correct statistical methodology to psychological data.
3.   The student will be able to utilize the appropriate statistical analysis to collected psychological data.
4.   The student will be able to explain the assumptions regarding various statistical tests.
5.   The student will be able to draw conclusions about whether a relationship between or among variables is supported by the results of the study.

ASSESSMENT OF COURSE LEARNING OUTCOMES
Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES
Student Handbook

https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

College Catalog
https://www.kckcc.edu/academics/catalog/index.html

College Policies and Statements
https://www.kckcc.edu/about/policies-statements/index.html

  Accessibility and Accommodations
https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.