

Course discipline/number/title: PSYC 2630: Statistics for the Behavioral Sciences

- A. CATALOG DESCRIPTION
  - 1. Credits: 4
  - 2. Hours/Week: 4
  - 3. Prerequisites (Course discipline/number): PSYC 2618, MATH 1115 or MATH 2208
  - 4. Other requirements: None
  - 5. MnTC Goals (if any): Goal 5: History and the Social and Behavioral Sciences
- B. COURSE DESCRIPTION: This course is an introduction to the basic procedures used in the collection and analysis of data in the behavioral sciences. Statistical software is used to conduct descriptive and inferential analyses, and students select and apply statistical procedures to help answer psychological research questions. Students learn to write conclusions that are supported by statistical analyses.
- C. DATE LAST REVISED (Month, year): December, 2024
- D. OUTLINE OF MAJOR CONTENT AREAS:
  - 1. Central tendency and variability
  - 2. Hypothesis testing
  - 3. Paremetric and nonparametric statistics used in psychological research (e.g., t-test, analysis of variance, correlation, regression, chi-square)
  - 4. Application of statistical software for data analysis
  - 5. APA format for reporting results
- E. LEARNING OUTCOMES (GENERAL): The student will be able to:
  - 1. Read, interpret, and summarize statistical conclusions from psychological and behavioral science sources.
  - 2. Select and apply the appropriate statistical procedure for a given hypothesis, scale of measurement, and experimental design.
  - 3. Use a statistical software package to conduct univariate and multivariate analyses.
  - 4. Use APA format to summarize results of analyses using common language and displays (e.g., graphs, tables).
- F. LEARNING OUTCOMES (MNTC):

Goal 5/History and the Social and Behavioral Sciences: The student will be able to:

- 1. Employ the methods and data that historians and social and behavioral scientists use to investigate the human condition.
- 2. Use and critique alternative explanatory systems or theories.
- 3. Develop and communicate alternative explanations or solutions for contemporary social issues.
- G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
  - 1. Exams
  - 2. Projects
  - 3. Written homework
  - 4. Presentations
- H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s): Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.
- I. SPECIAL INFORMATION (if any): None

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