



**BAKER COLLEGE**  
**STUDENT LEARNING OUTCOMES**

**PSY3660A Quantitative Research Methods**  
**3 Semester Credit Hours**

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**Student Learning Outcomes and Enabling Objectives**

1. Explore the use of the scientific method within psychology.
  - a. Discuss how scientific inquiry relates to the study of human behavior and the goals of psychology.
  - b. Apply the steps used in scientific inquiry using real life examples related to the field of psychology.
  - c. Discuss the role of research as a tool to evaluate the efficacy of applied psychology.
2. Critique psychological research.
  - a. Differentiate scholarly sources from other types of sources.
  - b. Practice research within scholarly database.
  - c. Discuss purpose of different sections of research articles within the scholarly literature of psychology (including introduction, literature review, methodology, results, and discussion).
3. Examine common research designs used in psychology.
  - a. Differentiate between quantitative, qualitative and mixed method designs.
  - b. Identify appropriate use for each of the three common methods.
4. Create a quantitative research proposal.
  - a. Apply the common steps related to developing and conducting a research study, including.
    - i. Identify research topics and problems
    - ii. Differentiate between samples and populations
    - iii. Create a literature review
    - iv. Select appropriate methods
    - v. Explore basic data sets and results
5. Analyze common elements of quantitative research designs.
  - a. Examine common quantitative research designs (true experiment, quasi-experiment and correlation).
  - b. Explain the common terms associated with research (research question, hypothesis, dependent and independent variable, between subjects/within subjects, correlation/causation, significance, effect size).

- c. Apply the terms/procedures used in developing and implementing research.
  - d. Describe the use of statistics in data analysis to determine results.
  - e. Describe the roles of reliability and validity within research.
6. Assess ethical considerations associated with research.
    - a. Examine history of ethics through review of professional ethical codes and assessment of landmark studies in psychology.
    - b. Discuss ethical considerations and issues within contemporary research.
  7. Communicate using the standards and guidelines established for the profession.
    - a. Develop APA formatting skills by incorporating proper APA format, in text citations, and references in written assignments.
    - b. Demonstrate effective writing and/or presentation skills for different purposes.

## **Big Ideas and Essential Questions**

### **Big Ideas**

- Scientific Method
- Research Methods
- Ethics
- Scientific Reporting

### **Essential Questions**

1. How does quantitative research inform evidence-based psychology?
2. Why is it important to follow the scientific method?
3. How do researchers design ethical studies?
4. Why is it important to understand the difference between quantitative and qualitative research methods?

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These SLOs are not approved for experiential credit.

**Effective: Fall 2024**