# University of Arkansas - Fort Smith 5210 Grand Avenue P. O. Box 3649 Fort Smith, AR 72913-3649 479-788-7000

### **General Syllabus**

### **PSYC 25133 Introduction to Behavioral Statistics**

Credit Hours: 3 Lecture Hours: 3 Laboratory or other types of Hours: 0

Prerequisite(s): PSYC 11003 General Psychology and MATH 11103 College

Mathematics and Quantitative Literacy or higher MATH course.

Effective Catalog: 2019-2020

### I. Course Information

### A. Catalog Description

Introduction to the use of data in answering empirical questions about human behavior. Emphasis on the development of statistical thinking and basic concepts of statistical analysis relevant to typical issues in the behavioral sciences. Analysis includes probability and hypothesis testing, descriptive and basic inferential statistics, and confidence intervals. Course is equivalent to MATH 21003 Probability and Statistics I.

#### **B.** Additional Information

This course is required. Open to all majors. PSYC 25133/MATH 21003 Probability and Statistics are suitable substitutes.

### II. Student Learning Outcomes

#### A. Subject Matter

Upon successful completion of this course, the student will be able to:

- 1. Demonstrate familiarity with the terminology of statistical methods.
- 2. Understand the roles and differences of descriptive and inferential statistics.
- 3. Demonstrate methods of data organizing and presenting data.
- 4. Apply statistics to use for decision-making and testing hypotheses.
- 5. Analyze data using a variety of basic statistical techniques.
- 6. Show familiarity with statistical software as a tool for learning and data analyses.
- 7. Understand the role of statistics in developing conclusions and gaining knowledge from data.

8. Be wise consumers of statistics in common media.

## **B.** University Learning Outcomes

This course enhances student abilities in the following areas:

### **Ethical Decision Making**

Students will recognize and analyze ethical dilemmas.

## **Communication Skills (written and oral)**

Students will communicate effectively with a variety of audiences in any setting.

## **Analytical Skills**

## **Critical Thinking Skills**

Students will draw conclusions and solve problems.

## **III.** Major Course Topics

- A. Descriptive Statistics
- B. Hypothesis Testing
- C. Inferential Statistics
- D. Behavioral Research
- E. Scientific Method
- F. Ethics