Minnesota State University Moorhead

PSY 230: Statistics for the Behavioral Sciences

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 45

Lab Hours/Week: 30

OJT Hours/Week: *.*

Prerequisites:

This course requires the following prerequisite

PSY 113 - General Psychology

Corequisites: PSY 230L

MnTC Goals: None

Descriptive and inferential statistics, hypothesis testing. Analysis of variance designs; multiple-comparison tests; nonparametric tests; computer application to statistics. Laboratory included.

B. COURSE EFFECTIVE DATES: 10/29/2012 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

- 1. Defining and measuring variables
- 2. Normal distribution and z scores
- 3. Probability
- 4. Sampling distribution
- 5. Introduction to hypothesis testing
- 6. t-tests
- 7. Analysis of Variance (ANOVA)
- 8. Non-parametric tests
- 9. Frequency distributions
- 10. Measures of central tendency and variability
- 11. Correlations and regression

D. LEARNING OUTCOMES (General)

- 1. How to conduct correlations and regression analyses.
- 2. How to evaluate various sources of information, printed or electronic.
- 3. How to use descriptive statistics and graphically summarize data.
- 4. Inferential statistical procedures such as use of t-test and various ANOVA analyses.
- 5. More complex research designs, such as between and within with one or more factors.
- 6. Other non-parametric techniques such as the chi-square test.
- 7. Use APA format to report statistical findings.
- 8. Use SPSS or other statistical package to conduct the analyses described above.
- 9. What are variables and how they are measured or manipulated.
- 10. What is the logic behind hypothesis testing and why it is important to understand it.
- 11. When to use multiple comparison tests and how to select the appropriate test.
- 12. Working knowledge of psychology related databases, such as PsyINFO.

Version 3.1.4 Page 1 of 2 04/16/2024 08:06 PM

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted

04/16/2024 08:06 PM Version 3.1.4 Page 2 of 2