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.

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

   None

F. LEARNER OUTCOMES ASSESSMENT

   As noted on course syllabus

G. SPECIAL INFORMATION

   None noted