

Minnesota State University Moorhead

PSY 231: Psychological Statistics and Methodology I

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites:

- PSY 113 - General Psychology

Corequisites: None

MnTC Goals: None

Introduction to research methods in psychology; descriptive and inferential statistics; elementary hypothesis testing. Laboratory included.

B. COURSE EFFECTIVE DATES: 06/01/1995 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. The scientific method.
2. Sources of research ideas.
3. Defining and measuring variables.
4. Ethics in research.
5. Selecting research participants.
6. Research strategies and validity.
7. The descriptive research strategy.
8. Frequency distributions.
9. Measures of central tendency and variability.
10. Correlational research.
11. Regression analysis.
12. The normal distribution and z scores.
13. Probability.
14. The sampling distribution.
15. Introduction to hypothesis testing.
16. The t-test for one sample.

D. LEARNING OUTCOMES (General)

1. Finding and using reference materials in the library (e.g. PsycINFO) and through the Internet.
2. How to evaluate various sources of information, printed or electronic.
3. Ethical concerns and guidelines regarding the use of human and animal participants in research.
4. How to generate ideas for research.
5. What are variables and how they are measured or manipulated.
6. What are the basic research designs in Psychology.
7. How to use descriptive statistics and graphically summarize data.
8. How to conduct correlations and regression analyses.
9. Why the reliability and validity of measures is an important consideration.
10. What is the logic behind hypothesis testing and why it is important to understand it.
11. How to conduct the t-test for one sample.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted