COURSE TITLE: Research and Evaluation
COURSE NUMBER: MCC 7806

I. MAJOR INSTRUCTIONAL GOALS:

GOAL A:
Demonstrate knowledge related to identifying and constructing operational definitions.

Learning Outcomes: The student will:

A-1 Identify the uses of research methods.
A-2 Demonstrate knowledge of the scientific approach and the goals of science.
A-3 Describe differences between basic and applied research.
A-4 Understand the use of research to improve counseling effectiveness

GOAL B:
Understand the process of identifying, constructing, and testing a research hypothesis and null hypothesis.

Learning Outcomes: The student will:

B-1 State the differences between a research hypothesis and a null hypothesis.
B-2 Demonstrate knowledge of probability and sampling distributions.
B-3 Demonstrate knowledge of how to identify independent and dependent variables.

GOAL C:
Understand how to identify the validity and reliability of the measurement instruments.

Learning Outcomes: The student will:

C-1 Understand basic differences between manipulated and measured variables.
C-2 Define test-retest, alternate forms, interrater, and split-half reliability.
C-3 Describe content, criterion-related, and construct validity.

GOAL D:
Demonstrate knowledge of how to identify, select, and construct qualitative and quantitative research design.

Learning Outcomes: The student will:
D-1 Demonstrate knowledge of the design of qualitative research studies including naturalistic observation, case studies, surveys, and historical research.

D-2 Demonstrate how to design quantitative research studies including experimental, quasi-experimental, differential, and correlation research.

**GOAL E:**
Demonstrate knowledge of how to prepare a research paper proposal.

**Learning Outcomes:** The student will:

E-1 Generate ideas for a research proposal.
E-2 Conduct library research and write a literature review.
E-3 Select a structure for a research proposal.

**GOAL F:**
Demonstrate knowledge of how to report research results.

**Learning Outcomes:** The student will:

F-1 Demonstrate knowledge of the structure of a research article.
F-2 Analyze and evaluate reports of research.

**GOAL G:**
Understand the principles, practices, and applications of needs assessment and program evaluation.

**Learning Outcomes:** The student will:

G-1 Describe the four general types of program evaluation.
G-2 Demonstrate an understanding of how to conduct a needs assessment.

**GOAL H:**
Demonstrate knowledge of the uses of computers for data management and analysis.

**Learning Outcomes:** The student will:

H-1 Demonstrate knowledge of the principles used by statistical analysis software packages to calculate statistics for any data set.
H-2 Identify the major statistical software packages such as SPSS, SAS, and Systat and their capabilities.

**GOAL I:**
Understand parametric (descriptive) and non-parametric (inferential) statistics.

**Learning Outcomes:** The student will:
I-1 Demonstrate knowledge of frequency distributions, measures of central tendency and graphs.
I-2 Demonstrate knowledge of correlations, t-tests, chi-square, ANOVA and MANOVA.

GOAL J:
Demonstrate knowledge of legal and ethical considerations in research.

Learning Outcomes: The student will:

J-1 Identify the major ethical issues in research.
J-2 Demonstrate knowledge of the principles of the ethics code for research for counselors.