Graduate Council Approval 11-18-04
College Council Approval 10-6-04

Southeast Missouri State University
Course Syllabus

Department of: Human Environmental Studies **Course No:** HE525

Title of Course: Evaluating Research in Human Services **Revision:** _____ **New:** Fall 2004

I. Catalogue Description and Credit Hours of Course:
Emphasizes understanding and evaluating research studies: identifying, differentiating, analyzing, and evaluating research components and processes. (3)

II. Prerequisite(s):
Introductory statistics course or permission of instructor

III. Purpose or Objectives of the Course:
A. Identify the vocabulary, rationale, and purpose of a research study.
B. Examine data collection and analysis strategies for a research study.
C. Evaluate the soundness of a research study.
D. Discuss ethical issues in research, and human subjects review.

IV. Expectation of Students:
A. Active participation in class discussions and activities
B. Satisfactory completion of all course assignments
C. Oral defense of a scientific research study
D. Satisfactory completion of mid semester and final exams
E. Uphold the University's academic honesty policy.

V. Course Outline: **Hours**

A. Research components 3
1. Purposes of science and research
2. Types of research
3. Definitions of a research problem and its logic
4. Types and definitions of variables
5. Research hypotheses
6. Methods
7. Findings
8. Conclusions
9. Recommendations

B. Research study rationales 3
1. Context
2. Relevance
3. Importance
4. Clarity

C. Research study purposes 3
1. Single or compound
2. Premises, assumptions, and biases
3. Describe a problem or condition
4. Analyze predictive factors of problems, solutions, or conditions
5. Test solutions or treatments to problems
6. The hypothesis
7. Bias

D. Research validation 3
1. Internal validity
2. Threats to internal validity
3. External validity
4. Threats to external validity
5. Linking theory, method, and evidence

E. Data collection strategies and issues 3
1. Context and population of the study
2. Sampling
3. Data collection integrity-matching method to sample, objectivity, timing, bias, effects

F. Statistical measures and reporting 6
1. Statistics reporting-SD, alpha level, significance level, sample size, statistical procedures used
2. Statistical tests to data matching-descriptive statistics, inferential statistics

G. Data findings, interpretations, and conclusions 6
1. Exploratory data analysis
2. Statistical power (*p* value)—level, direction, effect size
3. Statistical significance and practical significance (importance)
4. Limitations
5. Replication of results and reliability

H. Research article evaluation 12
1. Practicality of an investigation—definition of problem, accessibility of information sources, time limitations
2. Definition of the variables and relationships
3. Adequacy of the literature review and references
4. Clarity of the hypothesis
5. Description of the sample, instruments, and procedures
6. Appropriateness of the statistical measures

7. Clarity of validity and reliability issues
8. Identification of the error in, bias in, and alternative explanations for findings
9. Justification of generalizations and conclusion
10. Examination of the recommendations

I. Soundness criteria for a scientific research study 6
1. Relevance
2. Fit within field-of-knowledge
3. Methodology appropriateness
4. Findings credibility and importance
5. Conclusion and recommendations

Total 45

VI. Textbook:

Garden, E.R. (2001) *Evaluating research articles from start to finish (2nd ed)* Thousand Oaks, CA: SAGE Publishing Company.

References:

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.) Washington, DC: Author.

Gall, M.D., Borg, W.R., & Gall, J.P. (2002*). Educational research: An introduction* (7th ed.). White Plains, NY: Longman.

Gay, L.R., & Airasian, P. (2003*). Educational research: Competencies for analysis and application* (7th ed.). Upper Saddle River, NJ: Merrill.

Lyne, L.S. (2003). A cross section of education research: Journal articles for discussion and evaluation (2nd ed.). Los Angeles, CA: Pyrczak.

Vailant, A.A., Vaillant, S.K. (1985*).* Evaluating research in education and the behavioral sciences. *Wayne, NJ: Avery Publishing Group (ISBN: 0-89529-256-4; pending other publisher reprint).*

VII. Basis for Student Evaluation:

A. Written assignments	10%
B. Research study defense	45%
C. Group assignments	10%
D. Examinations	25%
E. Quizzes	10%

The weight of evaluation criteria may vary at the discretion of the instructor and will be indicated at the beginning of each course.