Lewis & Clark College
Graduate School of Education and Counseling

Course Syllabus
CPSY 535 Research Methods in Counseling

Term: Spring 2009
Meeting Time: Mondays 5:30 -8:45PM
Location: South Campus Conference Center Room 107
Instructor: Geoffrey Borthwick, ABD, M.S.
E-mail: gborthwick@lclark.edu

Texts: (required)

Mertens (2005). *Research & Evaluation in Education & Psychology* (2nd Ed). Thousand Oaks, CA: Sage.

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

Catalog Description:
Foundations of psychological research. Students are introduced to qualitative and quantitative research processes and basic concepts. Topics include (1) Elements of the research process. (2) Types of designs, program evaluation. (3) Ethical considerations of research: informed consent, research with diverse and vulnerable populations, research with children, human subjects review. (4) Basic measurement concepts: validity, reliability, norms, score interpretation. (5) Basic statistical concepts: frequency distributions, central tendency, measures of variability, correlation, normal curve, hypothesis testing, significance tests. Students read and evaluate examples of published research.

Course Goal and Objectives
The primary goal of this class is to enable students to have an understanding of research paradigms, the research process, and the skills required to critically analyze published research and / or conduct independent research.

The objectives of this class are to provide students with sufficient knowledge about the research process and practice in analyzing research articles to enable students by the end of the class to:

- Identify common research paradigms and understand the implications of them.
- Know the steps of the research process
- Write and identify research questions, hypotheses and theories.
- Understand the ethical issues involved with research on humans and animals.
- Identify and understand various quantitative and qualitative methods.
- Understand the trade-offs involved in the choice of a research design.
- Understand the concepts of reliability and validity and how they are related.
- Understand the concept of generalization.
- Critically evaluate published research articles.
- Design an original research proposal.

Course Calendar (dates are subject to change)

Jan 12	Overview of Course, Research Process, Scientific Method, Quantitative vs. Qualitative Methods, Introduction to Ethics
Jan 19	Martin Luther King Day
Jan 26	Ethics, Paradigms, Research Questions, Defining Variables, Define Population and Sample **Read: Chapter 1, 3, & pages 332-338**.
Feb 2	Data Collection **Read Chapter 12**
Feb 9	Sampling and Survey Research **Read Chapters 6 & 11**
	Quantitative Methods
Feb 16	Experimental and Quasi-Experimental Designs **Read Chapter 4**
Feb 23	Continue Quasi-Experimental and Single Case **Read Chapter 7**
March 2	Causal Comparative and Correlational Research **Read Chapter 5**
March 9 & 16	Data Analysis, and Testing **Read Chapter 13**
March 23	Spring Break
	Qualitative Methods
March 30	Program Evaluation **Read Chapter 2 – Quantitative Research Article Critique Due**
April 6	Qualitative Methods **Read Chapter 8**
April 13	Historical and Narrative Approaches **Read Chapter 9**
April 20	Qualitative Data Collection, Qualitative Analysis, Mixed Method Designs **Read pages 382-398, pages 420-427, & Chapter 10 – Research Proposal Due**
April 27	**Final Exam - Qualitative Research Article Critique Due**

Course Requirements
The graded requirements of the course include:

March 30	Quantitative Research Article Critique Due
April 20	Research Proposal Due
April 27	Final Exam
April 27	Qualitative Research Article Critique Due

Each is worth 25% of your course grade.

Overall Grade Scale (subject to possible curve):

	A = 93-100	A- = 90-92
B+ = 87-89	B = 83-86	B- = 80-82
C+ = 77-79	C = 73-76	C- = 70-72
D+ = 67-69	D = 63-66	D- = 60-62
	F = below 60	

Authorization Levels:
All levels

Policy Notes

(1) Moodle: I post helpful materials, lecture power point slides, the course syllabus, and announcements (such as schedule changes and extra credit opportunities) on the course's Blackboard page.

(2) Pass-Fail and Incomplete. See university requirements.

(3) Schedule Changes: I reserve the right to change the schedule as necessary. You are responsible for keeping track of schedule changes through attending class or Moodle.

(4) Special Situations: Students needing an accommodation should immediately inform the course instructor. Students are referred to Disability Services to document their disability and to provide support services when appropriate.

CPSY 535: Research Article Critique

The purpose of this task is for you to use skills you have acquired over the course of the term to evaluate and review an article from a professional journal. You are to use an article from a peer-reviewed journal.

Begin this critique with a short summary of the article you have chosen, just a paragraph or two summarizing the problem, results, and conclusions. A reader should be able to get a picture of your article just by reading these beginning sentences.

The following questions serve as the specific guide to the critique. Make sure that all of the areas covered in this guide are addressed. The critique should be, on average, four to six pages long.

Complete citation of article in APA style. This should be the first thing on your first page of the body.

Overall Review – General questions to keep in mind throughout your review.

Is the research question significant, and is the work original and important?

Have the instruments been demonstrated to have satisfactory reliability and validity (dependability and credibility)?

Are the outcome measures clearly related to the variables with which the investigation is concerned?

Does the research design fully and unambiguously test the hypothesis?

Are the participants representative of the population to which generalizations are made?

Did the researcher(s) observe ethical standards in the treatment of participants?

Is the research at an advanced enough stage to make publication of results meaningful?

ABSTRACT & INTRODUCTION

What is the goal/mission of the research?

What is the significance of the problem and the research?

What specific problem is being investigated by the article?

Does the introduction contain a statement of the problem?

Is this problem researchable?

What are the variables under investigation? Are these variables defined and the relationship between them described in an understandable way? Are the variables measurable as defined?

What significance does this problem have for you either personally &/or professionally as a counselor?

Review of Literature

Does the review of literature provide you with enough background to understand the problem being investigated?

Is it logical and concise and complete?

Does the review lead you to the hypotheses under investigation?

Hypotheses (or Statement of Problem)

What are the hypotheses/questions and are they clearly presented?

Are these questions/hypotheses stated in the article?

Are the hypotheses testable?

How are the variables operationally defined?

Are the operational definitions specifically identified in the article (either in the introduction or in the methods section)? Does the operational definition provide a way to measure the variables?

Are the variables operationally defined in a way that makes sense and are related to the concepts and constructs under investigation?

Would you operationally define the variables in the same way?

METHOD

Subjects and Sampling

What is the population being studied? Do the authors provide a description of the population?

What sampling technique was used? Was it described? Will the sampling technique used provide an unbiased sample? If not, what possible biases might result from the sample used?

Are the specific characteristics of the sample presented?

Do the authors discuss to whom the results can be generalized? Do you agree with their assessment? (Consider this: Is the accessible population used similar enough to the target population to permit generalization?)

Instruments

Do the instruments used appropriately measure the variables under investigation? Are they appropriate for the sample being studied?

Is an explanation for the specific choice of instruments provided?

Is reliability and validity data provided on the instrument (dependability and credibility)?
Would you use the instrument as described in the article?

Design

What general research approach was used? What specific research design was used?

Is the specific research design chosen appropriate for the questions/hypotheses under investigation?

Are any ethical considerations raised or discussed?

Internal Validity

Random assignment? Control groups?

Other methods were used to control for extraneous variables?

If not, what are some rival hypotheses that might have affected the results? Is this a problem for the research?

Procedures

Do the procedures as described provide an accurate picture of how the study was conducted? Are the procedures described in detail? Could you replicate the study if given the procedures as described?

Are any ethical considerations raised or discussed?

RESULTS – Statistical Conclusion Validity: how valid are the conclusions drawn from the data?

How did the sample size effect the results (i.e.; too small to detect a result or too large for result to have practical significance)?

Are the results presented in a concise and understandable format?

Are appropriate descriptive statistics provided?

Were appropriate statistical inferential techniques used, given the type of design and the hypotheses/questions under investigation?

Is each hypotheses tested? Are the results presented separately?

Can you tell by reading the results section if each hypothesis was supported or not?

DISCUSSION – Validity of Conclusions

Do the findings follow from the rest of the paper?

Is each finding discussed in relation to the original hypotheses being tested?

Are the results consistent or inconsistent with previous research? Do the authors discuss this?

Do the authors provide an understandable explanation of their results?

What conclusions do the authors draw from their findings? Do the conclusions realistically follow from their findings? Do you agree with their conclusions?

Do the authors try to generalize their results beyond the sample? Beyond their identified population? Are the generalizations made appropriate?

What are the implications of the results? Are these implications discussed? Does the discussion reflect their findings? Do you agree with the implications the authors present?

SUMMARY

Summarize the major strengths and weaknesses of the article. Was there anything in the article that made you question the conclusion (i.e.; due to the way the variables were defined and/or measured? The specific design and procedures used? The statistics used? Be specific.)?

Was the research pertinent? Does it have significance for you?

Was the research conducted and/or the findings discussed in a way that makes sense in the real world? What, if any, are the implications of the study for your personal and/or professional life? In other words, is the knowledge you've gained (hopefully) from reading this article going to impact you in any way? If yes, how. If not, why not.

Research Proposal

Submit a research plan, a description of a proposed study designed to investigate a particular problem. The problem to be investigated is to be in your area of study. You may assume that you have unlimited funds to conduct your study. The proposal should be, on average, four to six pages long.

Your grade will be partially determined by your inclusion and discussion of the following elements of the plan:

I. Introduction
- Statement of the Problem
- Review of Related Literature (Limit yourself to at most 5 articles)
- Statement of Hypotheses

II. Method
- Subjects – Include Ethical Issues
- Instruments
- Design
- Procedure

III. Data Analysis
- What particular statistical techniques are planned to be used?

IV. Time Schedule

V. Budget

VI. Bibliography of sources used to investigate the problem and design the study.