

**Lewis & Clark College**  
**Professional Mental Health Counseling Program**  
**MHC 535/ CPSY 530**  
**Research Methods in Counseling / Research Methods and Statistics I**  
**Syllabus Cover Sheet**

Required Objectives:

Professional Identity Standards (CACREP 2009 Standards)

- 1j. ethical standards of professional organizations and credentialing bodies, and applications of ethical and legal considerations in professional counseling
- 8a. the importance of research in advancing the counseling profession;
- 8b. research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research;
- 8c. statistical methods used in conducting research and program evaluation;
- 8d. principles, models, and applications of needs assessment, program evaluation, and the use of findings to effect program modifications;
- 8e. the use of research to inform evidence-based practice; and
- 8f. ethical and culturally relevant strategies for interpreting and reporting the results of research and/or program evaluation studies.
- 7c. statistical concepts, including scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, and correlations;
- 7d. reliability (i.e., theory of measurement error, models of reliability, and the use of reliability information);
- 7e. validity (i.e., evidence of validity, types of validity, and the relationship between reliability and validity);

Clinical Mental Health Standards (CACREP 2009 Standards)

- B1. Demonstrates the ability to apply and adhere to ethical and legal standards in clinical mental health counseling.
- I1. Understands how to critically evaluate research relevant to the practice of clinical mental health counseling.
- I2. Knows models of program evaluation for clinical mental health programs.

Additional Objectives

Student will Identify various paradigms for conducting research

**Key Required Assignments/Student Learning Outcomes**

These assignments are required for the course, but **will not be the only requirements/expectations**. The chart below lists the assignment, method of submission, and benchmark score/grade. These assignments are set up for upload to Taskstream and/or instructor provides rating for assignment. See syllabus for details.

	Proficient (A)	Benchmark (B)	Emerging (C)	Inadequate/Fail	As evidenced by:	Program Objective
<b>Goal</b>						
Students summarize and critique research relevant to counseling, addictions, and/or clinical mental health		Met expectations		Did not meet expectations	MHC 535: Article Summaries	9. Research and Assessment (2 of 7)
	Proficient (A)	Benchmark (B)	Emerging (C)	Inadequate/Fail	As evidenced by:	Program Objective
<b>Goal</b>						
Students summarize and critique research relevant to counseling, addictions, and/or clinical mental health	90-100% Assignment scores	80% -89% Assignment scores	70% -79 Assignment scores		MHC 535: Qualitative Article Critique	9. Research and Assessment (2 of 7)
	Proficient (A)	Benchmark (B)	Emerging (C)	Inadequate/Fail	As evidenced by:	Program Objective
<b>Goal</b>						
Students summarize and critique research relevant to counseling, addictions, and/or clinical mental health	90-100% Assignment scores	80% -89% Assignment scores	70% -79 Assignment scores		MHC 535: Quantitative Article Critique	9. Research and Assessment (2 of 7)

	Proficient (A)	Benchmark (B)	Emerging (C)	Inadequate/Fail	As evidenced by:	Program Objective
<b>Goal</b>						
Students understand models and methods of program evaluation	90-100% Assignment scores	80% -89% Assignment scores	70% -79 Assignment scores		MHC 535: Program Evaluation Article Summary/Review	9. Research and Assessment (3 of 7)

	Proficient (A)	Benchmark (B)	Emerging (C)	Inadequate/Fail	As evidenced by:	Program Objective
<b>Goal</b>						

Demonstrates an understanding of various types and designs of research relevant to counseling.	90-100% Assignment scores	80% -89% Assignment scores	70% -79 Assignment scores		MHC 535: Group Project: Development of a hypothetical mixed methods research proposal	9. Research and Assessment (4 of 7)
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**COURSE SYLLABUS COVER SHEET**  
Lewis & Clark College  
Graduate School of Education and Counseling

<b>Course Name</b>	<b>Research Methods &amp; Statistics 1</b>
<b>Course Number</b>	<b>CPSY 530-02</b>
<b>Term</b>	<b>Fall 2015</b>
<b>Department</b>	<b>Counseling Psychology</b>
<b>Textbooks/Materials</b>	<b>See attached</b>
<b>Faculty Name</b>	<b>Elizabeth Oshrin Parker</b>
<b>Faculty Phone/E-mail</b>	<b>eparker@lclark.edu</b>

**Catalogue Description:**

Introduction to research methods with an emphasis on design, sampling, measurement issues, and introductory data analysis. Topics include (1) research design: elements of the research process, types of designs, program evaluation; (2) ethical considerations of research: informed consent, research with diverse and vulnerable populations, research with children, human subjects review; (3) basic measurement concepts: validity, reliability, norms, score interpretation; (4) basic statistical concepts: frequency distributions, central tendency, measures of variability, correlation. Reviews Web-based resources for conducting research. Note: Taught during the fall semester only, as the first course of a two-semester sequence. Students who wish to pursue the thesis-option M.S. program are advised to take this sequence as early as possible in their course of study.

**Course Description:**

This course covers the essential concepts related to research design and methodology that practitioners need to become critical evaluators of research and prepare for conducting research in their practices. Focus is on understanding each component of the research process, qualitative and quantitative designs, program evaluation, measurement issues, and data analysis,

**Course Goals and Objectives:**

The primary goal of this class is to have students gain a more complete understanding of the research process which would allow them to critically analyze published research and/or be able to conduct independent research. It is assumed that this knowledge and skill will in turn allow students to evaluate research in their field(s) of expertise from a critical and informed perspective.

The objectives of this class will be to provide opportunities to learn and apply the skills necessary for critiquing and conducting research. Emphasis will be on the following components of the research process: research

questions and hypotheses, research design including qualitative research, action research and program evaluation, definition and operationalization of variables, and measurement issues. The impact of culture on research design and analysis will additionally be addressed.

By the end of the semester students will be able to:

- Identify various paradigms for conducting research (NASP 2.1, CC: 8b)
- Identify each of the steps involved in the development of a research project (NASP 2.9; CC: 8b, 8c, 8d)
- Write research questions and hypotheses (CC: 8b)
- Understand the ethical issues involved in working with human participants (CC: 8f)
- Identify and describe various types of quantitative research designs (CC: 8b)
- Identify and describe various types of qualitative research designs (CC: 8b)
- Identify the components and models of program evaluations, including needs assessments (NASP 2.9; CC: 8d, B3)
- Identify and describe validity issues inherent in different types of designs (CC: 8b, 8c, 8d)
- Discuss the use of research findings for program change (CC: 8d, B3)
- Discuss the issues involved in conducting real world research (CC: 8a, 8e)
- Discuss the impact of culture on various aspects of the research process (CC: 8f, 7f, 2c)
- Critically evaluate published research articles (NASP 2.1; CC: 8a, 8b, 8d, 8e)
- Design a proposal for research project (NASP 2.11; CC: 8a, 8b, 8e)
- Write an Introduction and Literature Review for a research project (thesis students only)

### **From the Marriage & Family Therapy Core Competencies & MCFT program standards**

Students:

- Understand research and program evaluation methodologies, both quantitative and qualitative, relevant to MFT and mental health services.
- Demonstrate an understanding of process and outcome, research design, methodology, basic statistics, with research knowledge in individual and family counseling
- Understand the legal, ethical, and contextual issues involved in the conduct of clinical research and program evaluation.
- Recognize informal research processes involved in therapy, own biases relative to research
- Know the extant MFT literature, research, and evidence-based practice.
- Read current MFT and other professional literature and use the literature to inform clinical practice.
- Critique professional research and assess the quality of research studies and program evaluation in the literature.
- Determine the effectiveness of clinical practice and techniques.
- Utilize research and technology applications in marital, couple, and family counseling
- Recognize opportunities for therapists and clients to participate in clinical research when appropriate

**Attendance requirements:** Class attendance is expected and required. Any missed class time will be made up by completing extra assignments designed by the instructor. Missing more than ten percent of class time may result in failure to complete the class. This would be 4.5 hours of a 45 hour class (3 credits), 3.0 hours for a 30 hour class (2 credits) or 1.5 hours for a 15 hour class (1 credit.) In case of extreme hardship and also at the discretion of the instructor, a grade of incomplete may be given for an assignment or the entire course. In such cases, the work to be submitted in order to remove the incomplete must be documented appropriately and stated deadlines met. Students are expected to be on time to class and tardiness may be seen as an absence that requires make-up work.

**Accommodations for Students with Special Needs and/or Disabilities:**

If you have a disability that may impact your academic performance, you may request accommodations by submitting documentation to the Student Support Services Office in the Albany Quadrangle (x7156). After you have submitted documentation and filled out paperwork there for the current semester requesting accommodations, staff in that office will notify me of the accommodations for which you are eligible. Please notify me of any special learning considerations that I should be aware of so that we can work together to make the appropriate accommodations.

**Partial Bibliography:**

- American Psychological Association (2010). *Publication manual of the American Psychological Association*. (6<sup>th</sup> Ed.). Washington, DC: American Psychological Association.
- Cone, J.D. & Foster, S.L. (1993). *Dissertations and theses from start to finish*. Washington, DC: American Psychological Association.
- Creswell (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (2<sup>nd</sup> ed). Thousand Oaks: Sage.
- Creswell (2009) *Research Design: Qualitative & Quantitative, Quantitative, and Mixed Methods Approaches* (3<sup>rd</sup> Ed). Thousand Oaks: Sage
- Denzin & Lincoln (2000). *Handbook of Qualitative Research* (2<sup>nd</sup> Ed.). Thousand Oaks: Sage
- Galvan, J.L. (1999). *Writing Literature Reviews*. Los Angeles: Pyczak Publishing.
- Heppner, P.P., Kivlighan, D. M., & Wampold, B.E. (1999). *Research Design in Counseling*. Pacific Grove, CA: Brooks/Cole.
- Holcomb, Z.C. (1997). *Real data. A statistics workbook based on empirical data*. Los Angeles: Pyczak Publishing.
- Holcomb, Z.C. (1927). *Interpreting Basic Statistics. A Guide and Workbook Based on Excerpts from Journal Articles*. Los Angeles: Pyczak Publishing.
- Holcomb, Z.C. (1997). *Real data. A statistics workbook based on empirical data*. Los Angeles: Pyczak Publishing.
- LeCompte & Schensul (1999). *Ethnographer's Toolkit*
- Leong & Austin (2006). *The psychology research handbook. A guide for graduate students and research assistants* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage Publications
- Pryzak, F. *Evaluating Research*. Los Angeles: Pyczak Publishing.
- Patten, M.L. (2000). *Understanding Research Methods. An Overview of the Essentials*. Los Angeles: Pyczak Publishing
- Maxwell, J. (1996). *Qualitative Research Design: An Interactive Approach* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage
- Mertens (2005). *Research & Evaluation in Education & Psychology* (2<sup>nd</sup> Ed). Thousand Oaks, CA: Sage.
- Moustakas, C. (1994). *Phenomenological Research Methods*. Thousand Oaks, CA: Sage.

Mertler, C.A. & Vannatta, R. A. (2005). *Advanced and Multivariate Statistical Methods. Practical Application and Interpretation* (3<sup>rd</sup> Ed.) Glendale, CA: Pyczak Publishing

Rosenthal, J.A.(2001). *Statistics and Data Interpretation for the Helping Professions*. Belmont, CA: Wadsworth/Thompson Learning

Weis, L. & Fine, M. (2000). *Speed bumps: A student-friendly guide to qualitative research*. New York: Columbia University, Teacher College Record.

**CPSY 530 - Section 2**  
**Research Methods & Statistics I**  
Fall Semester 2015  
Thursday 1:00pm-4:15pm  
York 116

Elizabeth Oshrin Parker  
Advising Hours by appointment  
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*“If we knew what it was we were doing, it would not be called research, would it?”*  
*Albert Einstein*

### **Course Description**

Introduction to research methods with an emphasis on design, sampling, measurement issues, and introductory data analysis. Topics include (1) Research design: elements of the research process, types of designs, program evaluation. (2) Ethical considerations of research: informed consent, research with diverse and vulnerable populations, research with children, human subjects review. (3) Basic measurement concepts: validity, reliability, norms, score interpretation. (4) Basic statistical concepts: frequency distributions, central tendency, measures of variability, correlation. Reviews Web-based resources for conducting research.

### **Evaluation course participation and grading**

Your course grade will be evaluated based off of the following modes of assessment:

**1. Completion of all required readings and active participation in class discussions, groups, and role-plays (50 points)**

All assigned readings must be completed in advance of the class in which they are to be discussed. Every student is responsible for coming to class prepared to participate in a meaningful discussion. Classroom group, discussions and role-plays are opportunities to bring up questions about the assigned readings, further your understanding of the concepts under study, and integrate course material into your understanding of research and integrate material into your clinical practice.

**2. Homework (50 points- 10 each)**

A total of five homework's will be assigned. Homework will be given in class or posted on moodle the week before it is due. See schedule below for due dates for each assignment. Homework should be double-spaced and in Times New Roman font.

**3. Article Critique (150 points- 50 each)**

There will be three article critiques due during the course of the semester. The first will focus on an article about program evaluation. The second will focus on a qualitative article and the third will focus on a quantitative article. This will be a take home assignment. All article critiques should be done in APA format. A more detailed explanation of the assignment will be handed out in class or posted on Moodle.

**4. 10 Questions (25 points)**

On December 3rd class you will turn in 10 questions. The purpose of this assignment is for you to create a reading guide of 10 questions that will help you critically read and critique research in the future.

While reading each chapter, identify key concepts that will help you when you are reading and critiquing research. At the end of each chapter create two questions, using those key concepts, that you will ask yourself when you read research in the future. For example, a question that might come out of the introduction chapter is: “What paradigm did the researchers use when conducting this study?”

### **5. Glossary Game (25 points)**

This assignment has two components. One component is to be done individually and the other component will be done in your research group.

*Individual task:* For each reading assignment you complete for the course, you will identify two glossary terms. One term should be a term you were previously unaware of, the other should be a concept that you think all people should be aware of when reading research. Please record the page number you found the term on within the reading as well as the terms definition.

*Group task:* During class time you will be given time to meet as a group. As a group you will identify 15 concepts that you have learned through the process of working on your group project.

These glossary terms will be turned into a game later on in the semester. A more detailed description of the glossary game will be provided in class.

### **6. Group Project (100 points)**

The group project is a power point presentation of a research proposal. The research proposal must be a mixed methods project containing both quantitative and qualitative components. Along with your group, you will design a research proposal pertaining to an issue relevant in your field. The proposal must be a systemic problem (ie. relate to couples or families). The proposal is a detailed description of a study designed to investigate a given problem in your field. The study you design should contain **both** quantitative and qualitative methods, however it is assumed that it will have one **primary** focus with additional/supplementary information gathered using the other approach.

Your grade will be partially determined by your inclusion and discussion of each element of a proposal. Each person in your group is expected to participate equally and fully in the completion of this project. However, that does not mean that each person must participate equally in each aspect of the task. Working out an equitable distribution of work is part of the process for your group.

A more detailed explanation of the assignment will be handed out in class.

Class Participation	50
Homework	50
Article Critique (3)	150
10 questions	25
Glossary Game	25
Group Project	100
Total	400

### **Final Grading**

A = 93-100

A- = 90-92

B + = 88-89

B = 83-87

B- = 80-82

C+ = 78-79

C = 73-77

C- = 70-72

**Late papers and assignments:** Any assignments turned in late (without previous permission) will automatically receive a 10% reduction in grade.

### **Required Texts:**

Mertens (2010). *Research and evaluation in education and psychology. Integrating diversity with quantitative, qualitative and mixed methods.* (3<sup>rd</sup> Ed). Thousand Oaks, CA: Sage.

American Psychological Association (2015). *Publication manual of the American Psychological Association.* (6<sup>th</sup> Ed.). Washington, DC: American Psychological Association.

### **Supplementary Texts & Workbooks**

Leong & Austin (1996). *The psychology research handbook. A guide for graduate students and research assistants.* Thousand Oaks, CA: Sage Publications

Cone, J.D. & Foster, S.L. (2006). *Dissertations and theses from start to finish (2<sup>nd</sup> Ed).*. Washington, DC: American Psychological Association.

### Tentative Course Schedule

<u>Date</u>	<u>General Topic</u>	<u>“Official” Topic</u>	<u>Readings for Class</u>	<u>Assign/ Hmwk DUE</u>	<u>Points</u>
10-Sep	Introduction  Goals of the class	Class overview  Introduction to the Research Process  Syllabus review  Researcher/Practitioner gap  APA overview			
17-Sep	Literature Reviews World Views	Reading a literature review- what makes a good argument?  Research questions  Defining populations and samples  Frameworks/ Paradigms/lenses	Mertens Ch 1  Mertens Ch 3	Homework #1 – Lit review and paradigm	10 points
24-Sep	What is the purpose of my research – what problem am I addressing  What, how and who shall I study?	library research/problem purpose statement		Instructor will be gone, groups should meet to complete Homework #2	
1-Oct	Situating Research Research on the Job Mixed Methods	Program Evaluation & Needs Assessment	Mertens Ch 2 & 10	Homework #2- Research Problem  Bring program evaluation article to class	10 points

<u>Date</u>	<u>General Topic</u>	<u>“Official” Topic</u>	<u>Readings for Class</u>	<u>Assign/Hmwk DUE</u>	<u>Points</u>
8-Oct	Understanding Qualitative Research  Qualitative questions  What Qualitative Approach to use?	General Methodological Guidelines  Developing a Qualitative Question  Types of Qualitative Approaches/Designs  Qualitative sampling strategies	Ch 8 & 9	Program Evaluation Critique	50 points
15-Oct	Collecting data	Focus groups/Interviews	Mertens 12	Homework #3 Observation Homework	10 points
22-Oct	How will I analyze and interpret my data?  What does good qualitative research look like?  Summary of Qualitative	Analyzing & Interpreting Qualitative Data  Ensuring Quality of Data Collection	Mertens 13	Bring qualitative article to class	
29-Oct	Understanding Quantitative Research  What design will I use?  Hypotheses Sampling in Quantitative	Overview of Quantitative Research  Outcome Research Survey Research Single Subject Experimental Causal Comparative  Probability Sampling	Mertens 4 & 5	Qualitative Critique	50 points

<u>Date</u>	<u>General Topic</u>	<u>“Official” Topic</u>	<u>Readings for Class</u>	<u>Assign/Hmwk DUE</u>	<u>Points</u>
5-Nov	How will I analyze my data  Am I measuring what I think?  Choosing Instruments	Designing & Operationalizing Independent & Dependent Variables  Psychometric Issues Norms & Standardization	Mertens 12 pp 364 - 378  Mertens 13 pp. 417 - 422	Homework 4 Measurement assignment	10 points
12-Nov	Surveys and Other Designs  Basic Descriptive Statistics	Reliability and Validity	Mertens 12 394 – 404 Mertens 13 403- 421	Homework 5 Self care assignment	10 points
19-Nov	How will I analyze my data  How will I interpret the results?  Overview of comparison of means and regression	Overview of Statistical Concepts: Normal Curve Standard Scores SEM Analyzing Data Inferential Statistics  Comparison of means  Regression		Glossary Game	25 points
25-Nov	<b>Thanksgiving break</b>				
3-Dec	How do I interpret more sophisticated analysis?  Quantitative Discussion	Path Analysis Growth curve modeling	Mertens Ch 13 pp 422 - 437	10 questions  Bring quantitative article to class	25 points

<u>Date</u>	<u>General Topic</u>	<u>“Official” Topic</u>	<u>Readings for Class</u>	<u>Assign/ Hmwk DUE</u>	<u>Points</u>
10-Dec	Group Projects Social Justice in Counseling Critiquing	Group Projects		Quantitative Critique Group Projects	
17-Dec	Group Projects Research Game Night	Group Projects		Quantitative Critique Group Projects	50 points 100 points