

COURSE SYLLABUS COVER SHEET
Lewis & Clark College
Graduate School of Education and Counseling

Course Name	CPSY 530 – Section 1
Course Number	Research Methods & Statistics I
Term	Fall 2008
Department	Counseling Psychology
Textbooks/Materials	See attached
Faculty Name	Carol Doyle
Faculty Phone/E-mail	cdoyle@lclark.edu
Faculty Office	Rogers Hall 317

Catalogue Description (*copy from current catalogue*):

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.

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. The secondary goal is for students to gain an introductory understanding of measurement issues in research and assessment.

The objectives of this class will be to provide opportunities to learn and apply the skills necessary for evaluating research, including analyzing published instruments, and conducting independent 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, 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
- Identify each of the steps involved in the development of a research project
- Write research questions and hypotheses
- Understand the ethical issues involved in working with human participants
- Identify and describe various types of quantitative research designs
- Identify and describe various types of qualitative research designs
- Identify and describe validity issues inherent in different types of designs
- Discuss the issues involved in conducting real world research

- Discuss the impact of culture on various aspects of the research process
- Critically evaluate published research articles
- Design a proposal for research project
- Write an Introduction to a research plan (thesis students only)

Additionally, the course will cover the objectives and competencies from your professional organizations. These include:

From the NASP standards,

Students will:

- Have knowledge of research, statistics and evaluation methods
- Be able to evaluate research,
- Be able to translate research into practice
- Understand research design and statistics in sufficient depth to plan and conduct investigations and program evaluations for improvement of services
- Have knowledge of varied models and methods of assessment that yield information useful in identifying strengths and needs in understanding problems and in measuring progress and accomplishments
- Have knowledge of information sources and technology relevant to their work
- Access, evaluate, and utilize information sources and technology in ways that safeguard or enhance the quality of services

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

- 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

From the CACREP Standards

- The importance of research and opportunities and difficulties in conducting research in the counseling profession,
- Research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research,
- Use of technology and statistical methods in conducting research and program evaluation,
- Principles, models, and applications of needs assessment, program evaluation, and use of findings to effect program modifications,
- Use of research to improve counseling effectiveness
- Legal and ethical issues in conducting research

Course Calendar:
See attached

Course Requirements: see attached

The graded requirements of the course differ dependent on whether you are an M.S. student in the School Psychology program, an M.A. student in the MFT or other program not planning to complete a thesis, or a student working toward admission to the M.S. and planning to complete a thesis. Overall, the requirements of the course include, weekly homework and/or in class assignments, quizzes, the development of a research article critique manual, a journal of questions from the reading, a research methods glossary, a group research project and/or introduction to a research plan, a critique of a research article.

Attendance requirements: Any student who misses three or more classes will automatically fail the course.

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

Evaluation and Assessment:

Each assignment will be graded via a point system. Generally speaking, The following grades can be associated with the points for each assignment

90% of points possible	-	A
80% of points possible	-	B
70% of points possible	-	C
60% of points possible	-	D
less than 60% of points possible		F

Additionally, if the requirements for an assignment are met, the points given will be associated with a B. If one exceeds the requirements of the assignment there point total will improve accordingly

The points associated with each assignment are attached

Authorization Levels:

All levels

Partial Bibliography:

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.

American Psychological Association (1994). *Publication manual of the American Psychological Association*. (5th 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.

Galvan, J.L. (1999). *Writing Literature Reviews*. Los Angeles: Pyczak Publishing.

Patten, M.L. (2000). *Understanding Research Methods. An Overview of the Essentials*. Los Angeles: Pyczak Publishing.

CPSY 530 - Section 1
Research Methods & Statistics I
 Fall Semester 2008
 Wednesdays 5:30 - 8:45
 SSSC 101

Carol Doyle, Ph.D.

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“Research is always carried out by an individual with a life and a lifeworld ..., a personality, a social context, and various personal and practical challenges and conflicts, all of which affect the research, from the choice of a research question or topic, through the method used, to the reporting of the project’s outcome. Most research textbooks do not bring the living reality of you, the researcher, into the discussion of research. We believe that the person is always at the center of the process in inquiry – that you will always be at the center of your own research, which in turn will always be a part of you” (Bentz, V. M. & Shapiro, J. J. (1998). *Mindful Inquiry in Social Research*, p 4.)

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School Psychology, MFT, & Non-thesis Students

Class Participation	60 points
Homework/Assignments	150 points
Article Summaries	80 points
Article Discussions	60 points
Glossaries & Journal	150 points
Group Project	120 points
Research Article Critique	100 points
Final	30 points

Thesis Students

Class Participation	60 points
Homework/Assignments	150 points
Article Summaries	80 points
Article Discussions	60 points
Glossaries & Journal	130 points
Lit Review/Presentation	150 points
Research Article Critique	100 points
Final	30 points

Final grades will be based on a 750 point total and will be distributed as follows:

675 and above	A
600- 674	B
525 - 599	C
450 - 524	D

Required Texts:

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.

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. (1993). *Dissertations and theses from start to finish*. Washington, DC: American Psychological Association.

Tentative Schedule of Classes

<u>Date</u>	<u>General Topic</u>	<u>“Official” Topic</u>	<u>Readings for Class</u>	<u>Assign/Hmwrk</u>	
Sept 3	How and what shall I study?	Class Overview Introduction to the Research Process Overview of differences: Qualitative & Quantitative Approaches Defining populations and samples Library Research Evaluating Sources		In class Assignment 1	20 pts
Sept 10	Reading/Glossary Check In What is my point of view Ensuring my participants are treated ethically What is my Question/hypothesis	Frameworks/paradigms HCRC/IRB standards Research questions Defining variables	Mertens 1 & 3 HSRC application OHRP website Evidence Article	A 2 Evaluating sources	20 pts
Qualitative Research Designs					
Sept 17	Reading/Glossary Check In What Qualitative Approach will I use	Qualitative Research Design	Mertens 8 & 9	A 3 Light Review	20 pts
Sept 24	Reading/Glossary Check In Sampling Strategies for qualitative research What do qualitative methods look like?	Qualitative Methods Additional Qualitative Approaches	Mertens 11 (317 – 321) 12 (382 – 394)	A 4	20 pts
Oct 1	Reading/Glossary Check In How will I analyze and interpret my data?	Group discussions – qualitative designs Qualitative Analysis	Mertens 13 420 –7	Qualitative Discussion Qualitative Article summary due	30 pts 30 pts

<u>Date</u>	<u>General Topic</u>	<u>“Official” Topic</u>	<u>Readings for Class</u>	<u>Assign/Hmwrk</u>	
Quantitative Research Designs					
Oct 8	What design will I use? Validity Issues in Research Design What will my “intervention” look like? What will my “outcome” look like?	Overview of Quantitative Designs Outcome Research Designing & Operationalizing Independent & Dependent Variables	Mertens 4 – 6	Qualitative – Glossaries due A 5	40 pts
Oct 15	Am I measuring what I think	Reliability and Validity Psychometric Issues	Mertens 12	A 6	20 pts
Measurement Issues					
Oct 22	What is a “Test”	Tests and Testing Process Norms & Standardization	Reading to be Assigned	A 7	20 pts
Oct 29	What do scores mean	Normal Curve Review Standard Scores SEM Test Construction	Reading to be Assigned	A 8	20 pts
Nov 5	Reading/Glossary Check In Additional Quantitative designs Who will my participants be?	Single Subject Designs/ Process Research Sampling Participants	Mertens 7 Mertens 11 (314-317)	Measurement glossaries due	20 pts
Nov 12	Reading/Glossary Check In How will I analyze my data How will I interpret the results?	Analyzing Data Review of Statistical Concepts: Descriptive Statistics Normal Curve Inferential Statistics	Mertens 13 (420 – 427)	Quantitative glossaries due Lit review due for grp project due	40 pts
Mixed Methods & Transformational designs					
Nov 19	Reading/Glossary Check In Combining approaches What other types of research might I use in my future	Mixed Methods Action Research Program Evaluation	Mertens Chapter 10 & 2	Quantitative discussion Quantitative article summary due	30 pts 30 pts

<u>Date</u>	<u>General Topic</u>	<u>“Official” Topic</u>	<u>Readings for Class</u>	<u>Assign/Hmwrk</u>	
<i>Nov 26</i>	<i>Thanksgiving Break</i>	<i>No class</i>			
Dec 3	Putting it all together	Final Discussion Thesis topic presentations		Journals due Article critique due	120 pts
Dec 10	Last Class	Group Projects Final Discussion Thesis Proposal Introduction due		Final (Discussion) Article critique due	120 30 pts 100 pts