

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

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| Course Name | CPSY 530 – Section 1 |
| Course Number | Research Methods & Statistics I |
| Term | Fall 2013 |
| Department | Counseling Psychology |
| Textbooks/Materials | See attached |
| Faculty Name | Marjorie McGee |
| Faculty Phone/E-mail | Please use email |
| Faculty Office | NA |

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. Included in this understanding are models of program evaluation and the use of research findings for program modification. 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, including needs assessments and program evaluation. 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 (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 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 Domains

2.1 Data-Based Decision Making and Accountability

- School psychologists have knowledge of varied models and methods of assessment and data collection for identifying strengths and needs, developing effective services and programs, and measuring progress and outcomes

2.4 Interventions and Mental Health Services to Develop Social and Life Skills

- School psychologists have knowledge of biological, cultural, developmental, social influences on behavior and emotional impacts on learning and life skills, and evidence-based strategies to promote social-emotional functioning and mental health

2.5 School-Wide Practices to Promote Learning

- School Psychologists have knowledge of school and systems structure, organization, and theory; general and special education; technology resources; and evidence-based school practices that promote learning and mental health

2.9 Research and Program Evaluation

- School Psychologists have knowledge of research design, statistics, measurement, varied data collection and analysis techniques, and program evaluation sufficient for understanding research and interpreting data in applied settings

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

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 (STILL UNDER DEVELOPMENT)

Course Requirements: See attached 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: 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.

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

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|----------------------------------|---|---|
| 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, Similarly, if the assignment does not meet the requirements point total will decrease accordingly. The points associated with each assignment are attached.

Authorization Levels: All levels

Partial Bibliography:

American Psychological Association (2010). *Publication manual of the American Psychological Association*. (6th 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* (2nd ed). Thousand Oaks: Sage.

Creswell (2009) *Research Design: Qualitative & Quantitative, Quantitative, and Mixed Methods Approaches* (3rd Ed). Thousand Oaks: Sage

Denzin & Lincoln (2000). *Handbook of Qualitative Research* (2nd 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: Pyrczak Publishing.
- Holcomb, Z.C. (1927). *Interpreting Basic Statistics. A Guide and Workbook Based on Excerpts from Journal Articles.* Los Angeles: Pyrczak Publishing.
- Holcomb, Z.C. (1997). *Real data. A statistics workbook based on empirical data.* Los Angeles: Pyrczak Publishing.
- LeCompte & Schensul (1999). *Ethnographer's Toolkit*
- Leong & Austin (2006). *The psychology research handbook. A guide for graduate students and research assistants (2nd Ed.).* Thousand Oaks, CA: Sage Publications
- Pryzak, F. *Evaluating Research.* Los Angeles: Pyrczak Publishing.
- Patten, M.L. (2000). *Understanding Research Methods. An Overview of the Essentials.* Los Angeles: Pyrczak Publishing
- Maxwell, J. (1996). *Qualitative Research Design: An Interactive Approach (2nd Ed.).* Thousand Oaks, CA: Sage
- Mertens (2005). *Research & Evaluation in Education & Psychology (2nd 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 (3rd Ed.)* Glendale, CA: Pyrczak 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 1

Research Methods & Statistics I

Fall Semester 2013. Wednesday 5:30-8:50 Room: York 115

Marjorie McGee, Ph.D.

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Office hours are by arrangement via email

*“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.)*

Course Description

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Requirements:

The requirements of the course are summarized below. In all assignments, I am looking for the development of a critical lens in regards to research. For this reason the *BIAS FREE* Framework is used to help identify and address oppressive bias in all aspects of the research process. For most of these assignments I will provide detailed handouts in advance.

- In class participation and discussion (100 pts.)
- Institutional Review Board Processes and Training (50 pts)
- Weekly homework and/or in class assignments (100 pts.)
- Development of your own research tools/aids (75 pts.)
- Article summaries demonstrating critical thought and understanding (100 pts)
- Quizzes (3 during the term) (75 pts)
- Group Project (150 pts)

1. **Preparation and in-class participation in Discussion (100 pts.).** Participants are expected to attend all classes and complete all readings and assignments before each class session. In addition, I expect you to come to class prepared to contribute to the discussion. It is also the responsibility of all participants to ensure that everyone can participate.

People from different communities have been socialized to participate in different ways. Our own personal inclinations also affect how much we participate. To take this into account, popular educators often use a technique called, “**Step Up/Step Back.**” The idea is that if you are one of those participants who is very likely to participate, try taking a step back to make room for your fellow participants. If you are one of those participants who tends to wait until there is space for you in the discussion, try stepping up and asserting yourself a little more. I will sometimes actively create space for those who haven’t spoken yet, but I will never put you on the spot and force you to participate.

Most weeks we will break into **cooperative learning groups**; this will be set up in such a way that everyone has a chance to work with all members in the class, and that everyone practices a different role in the group. As you read the readings each week, in addition to the specific issues/questions that you might have,

please also consider the questions listed below. This will help discussion in the cooperative learning groups that will be formed every week.

- What caught your attention in the readings? Did anything surprise you?
 - What are the most important ideas in the readings (from your perspective, of course)?
 - How can you apply what you read in your own practice and research? Your group project?
2. **Weekly homework and/or in class assignments (100 points)** 10 homework assignments during the term.
 3. **Institutional Review Board Processes and Training (50 points)** Review Lewis and Clark IRB process (Human Subjects Research Committee at http://www.lclark.edu/committees/human_subjects_research/ AND IRB training completed online at <http://phrp.nihtraining.com/users/login.php> and **certificate of completion** turned by **September 25th**.
 4. **Development of your own research tools/aids [75 points]. Three components:** a) glossary of research terms; and b) annotated “Map” (mind map, table, narrative, flow charts, etc.) of diverse research methods; and c) creating (and demonstrating) a system/style to conduct a literature review with annotations. All three are due by **December 4th**; you can begin to turn these in at any time) *More details provided in handout.*
 5. **Three article reviews (100 points)** (All three are due by **Nov. 6**; you can begin to turn these in at any time). This assignment involves writing 1-page reviews of five research articles from peer-reviewed journals; you can use this assignment to build the literature review component of the group project, assuming that each group member reviews a unique (no duplication) article. *More details provided in handout.*
 6. **Quizzes (75 points)** I will provide a heads up (of materials that might be covered, etc) of the upcoming quiz (three over the course of the term), usually one week before.
 7. **Group Project (150 points)** with three components: a) preliminary (draft) statement of problem, research question, and literature review; b) oral presentation; and c) written documentation (with polished statement of problem, research questions and literature review). *Details provided in handout.*

Final grades will be based on a 650 point total and will be distributed as follows:

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|-------------|---|
| 585 & above | A |
| 520-584 | B |
| 455-519 | C |
| 390-454 | D |

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.* (3rd Ed). Thousand Oaks, CA: Sage.

American Psychological Association (2010). *Publication manual of the American Psychological Association.* (6th Ed.). Washington, DC: American Psychological Association.

Note: Up to three additional required readings may be posted in Moodle during the term; students will be given 2 advance notice.