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, 8b)
- 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 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**

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 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: 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:

- 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:


“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

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.

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<table>
<thead>
<tr>
<th>School Psychology, MFT, &amp; Non-thesis Students</th>
<th>Thesis Students</th>
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</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>Class Participation</td>
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<tr>
<td>100 points</td>
<td>100 points</td>
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<tr>
<td>Homework Assignments</td>
<td>Homework/Assignments</td>
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<tr>
<td>140 points</td>
<td>140 points</td>
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<tr>
<td>Article Summaries</td>
<td>Article Summaries</td>
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<td>100 points</td>
<td>100 points</td>
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<tr>
<td>Critique Discussions</td>
<td>Critique Discussions</td>
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<td>60 points</td>
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<td>Glossaries</td>
<td>Glossaries</td>
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<td>50 points</td>
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<td>Critique Questions</td>
<td>Critique Questions</td>
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<td>35 points</td>
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<td>Journal</td>
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<td>35 points</td>
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<td>Group Project</td>
<td>Lit Review/Presentation</td>
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<tr>
<td>150 points</td>
<td>130 (20) points</td>
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<tr>
<td>Final</td>
<td>Final</td>
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<td>30 points</td>
<td>30 points</td>
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Final grades will be based on a 700 point total and will be distributed as follows:

- 630 & above: A
- 560 - 629: B
- 490 - 559: C
- 420 - 489: D
Late papers and assignments: Any assignments turned in late (without previous permission) will automatically receive a 10% reduction in grade.

Required Texts:


Supplementary Texts & Workbooks

## Tentative Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>General Topic</th>
<th>“Official” Topic</th>
<th>Readings for Class</th>
<th>Assign/Hmwk DUE</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 5</td>
<td><strong>Introduction</strong></td>
<td><strong>Class overview</strong></td>
<td>Mertens p. 6</td>
<td>In class Assignment (1)</td>
<td>10 pts</td>
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<tr>
<td></td>
<td>Goals</td>
<td><strong>Introduction to the Research Process</strong></td>
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<td></td>
<td><strong>Gathering Information</strong></td>
<td><strong>Reviewing the Research</strong></td>
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<td><strong>Evaluating Sources</strong></td>
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<td><strong>Lit Review and writing</strong></td>
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<td></td>
<td></td>
<td><strong>Research Timeline</strong></td>
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<tr>
<td>Sept 12</td>
<td><strong>What is my research worldview?</strong></td>
<td><strong>Frameworks/paradigms</strong></td>
<td>Mertens 1, 3 &amp; 10; Ch 13-432 - 448</td>
<td>Hmwk 1</td>
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<td></td>
<td></td>
<td><strong>Similarities and differences</strong></td>
<td>APA manual Ch 1 (pp. 9-11), 2 &amp; 3; 6 &amp; 7</td>
<td>light survey journals..</td>
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<td></td>
<td><strong>What, how and who shall I study?</strong></td>
<td><strong>Overview of types and differences: comparisons</strong></td>
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<tr>
<td>Sept 19</td>
<td><strong>What is the purpose of my research – what problem am I addressing</strong></td>
<td><strong>Problem Sensing/Conceptualization</strong></td>
<td>Mertens (p. 115); Ch 11</td>
<td></td>
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<td><strong>Participants &amp; Sampling</strong></td>
<td>HSRC application</td>
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<td></td>
<td><strong>Who will my participants be?</strong></td>
<td><strong>Defining populations and samples</strong></td>
<td>OHRP website</td>
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<td><strong>Treating Participants Ethically</strong></td>
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<td></td>
<td><strong>You want to do what?!?!?!</strong></td>
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<td></td>
<td><strong>Understanding Qualitative Research</strong></td>
<td><strong>General Methodological Guidelines</strong></td>
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<td><strong>Developing a Qualitative Question</strong></td>
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</tbody>
</table>
| Oct 3 | **Qualitative questions**  
What Qualitative Design to use?  
How will I collect my data | Types of Qualitative Designs  
5 questions  
What Qualitative Approach will I use  
Sampling Strategies for qualitative research  
**observation** | Mertens Ch 8  
(pp. 230 – 265); 9  
Review qualitative sampling Ch 11(pp 320-325) | Hmwk 3 | 20 pts |
| Oct 10 | Collecting data cont’  
Focus groups/Interviews  
Ensuring Quality of Data Collection | Mertens Ch 12 (pp. 379, 382-383, 388, 389-98) | Hmwk 4 – | 20 pts |
| Oct 17 | How will I analyze and interpret my data?  
What does good qualitative research look like? | Analyzing & Interpreting Qualitative Data | Mertens 13  
423 – 432, 437 – 442 | Qualitative – Glossaries due | 25 pts |
| Oct 24 | **Summary of Qualitative**  
Group Article Critique qualitative designs | Qualitative Article summary due  
Qualitative Critique | | | 40 pts  
| Oct 31 | **Understanding Quantitative Research**  
What design will I use?  
What will my “intervention” look like?  
What will my “outcome” look like? | Overview of Quantitative Research  
Outcome Research  
Survey Research  
Single Subject  
Experimental  
Causal Comparative  
Designing & Operationalizing Independent & Dependent Variables  
Review of Sampling Participants | Mertens 4 – 7 | Hmwk 5 | 20 pts |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading Material</th>
<th>Assignments</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What is a score and what does it mean?</td>
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<tr>
<td></td>
<td>How do I summarize my data</td>
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<tr>
<td>Nov 14</td>
<td>How will I analyze my data</td>
<td>Analyzing Data Inferential Statistics Group article critique quantitative design</td>
<td>Review Mertens 13 408- 423</td>
<td>A 7 test review reaction Lit review for grp project Or Quantitative article summary &amp; Quantitative critique 20 pts</td>
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<tr>
<td></td>
<td>How will I interpret the results?</td>
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<td>Conceptual therapy/ article discussion</td>
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<tr>
<td>Nov 21</td>
<td><strong>Thanksgiving Break</strong></td>
<td><strong>No class</strong></td>
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<tr>
<td>Nov 28</td>
<td>What other types of research might I use in my future practice</td>
<td>Transformational Designs PAR Group discussion/quiz quantitative design</td>
<td>Lit review for grp project Or Quantitative article summary due Quantitative discussion Glossaries Due</td>
<td>40 pts 30 pts</td>
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<tr>
<td></td>
<td>Conceptual therapy/ article discussion</td>
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<tr>
<td>Dec 5</td>
<td><strong>Group Projects</strong></td>
<td><strong>Group Projects</strong></td>
<td>Critique questions due</td>
<td>120 pts 40 pts</td>
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<tr>
<td></td>
<td>Final Pt 1 Putting it all together</td>
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<tr>
<td>Dec 12</td>
<td><strong>Group Projects</strong></td>
<td><strong>Group Projects</strong></td>
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<td></td>
<td>Final pt 2 (Discussion)</td>
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