Objectives

This course is a part of the Ph.D. core curriculum in the Department of Rehabilitation Psychology and Special Education. It focuses on the application of research concepts and methods in order for students to become competent in conceptualizing, formulating, designing, and conducting their own research. Course content, activities, and assignments have been designed so that students will be able to:

- Develop foundational knowledge of quantitative and qualitative research designs including problems and hypotheses; constructs, variables, and definitions; designs of research; measurements; and data collection
- Understand the role and the importance of research in advancing the counseling profession
- Become proficient in critiquing counselling research to inform counseling practice
- Become familiar with advanced research designs, methods, and multivariate statistics in professional counseling research
- Become knowledgeable of classic research in the counseling, rehabilitation, and psychology literature
- Become proficient in the use of statistical packages such as the SPSS
- Gain awareness of the implications of design issues when working with diverse populations and multicultural topics
- Gain awareness of the theories supporting program evaluation; understand formative and summative evaluation and how they related to counseling agencies and social
support units; understand the processes associated with sound program evaluation; become proficient in the use program evaluation tools

- Develop competence to evaluate rehabilitation counseling research proposals with regard to: (a) the sufficiency of the literature review as a foundation for the research questions/hypotheses, (b) the clarity of the research questions/hypotheses, (c) the sufficiency of the reason(s) for conducting the study, and (d) the adequacy of the proposed methodology
- Develop dissertation research ideas
- Develop skills in developing a dissertation research proposal. The proposal will contain the research problem (the research questions and why they are important to address), a review of the literature to provide a foundation for the research questions/hypotheses, and the research methodology (e.g., the research design, the sampling population, instrumentation, procedures, and data analysis, etc.)

Readings


Note: Articles will be posted for topic areas and can be found at the Learn@UW course website.

Accommodations

I wish to fully include persons with disabilities in this course. Please let me know if you need accommodations in the curriculum, instruction, or assessments in this course to enable you to fully participate. I will attempt to maintain the confidentiality of the information you share with me.

Procedures and Requirements

Class activities will include presentations by the instructor related to class content, with readings associated with the content presented; brief informal presentations by class members related to specific methodologies and related topics that are particularly relevant to their own research interests and those of others in the class; and exercises related to various topics, including data preparation, coding, modification, analysis, and interpretation. The more specific topics to be covered will remain somewhat flexible, depending on the research interests of individual members of the group and the methodologies entailed in the research to be pursued. Real data sets will be used in data coding, preparation, modification, and analysis exercises.

Students will complete assignments to reinforce their understanding of basic and advanced research designs and methodology in rehabilitation counseling. A major product to be prepared by each class member will be a research proposal, which could ultimately become the dissertation proposal. The proposal should be prepared according to APA style, and more information regarding format will be provided. The proposal is intended as an exercise in
applying content covered in the course related to research design and methodologies. In addition, each class member will present and defend his or her proposal in a simulated dissertation proposal meeting, with the instructor and other class members serving as the dissertation committee, allowing further opportunities for everyone in the class to apply course content.
## LECTURE TOPICS AND READING SCHEDULE

<table>
<thead>
<tr>
<th>Class #</th>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments</th>
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| 1       | 1/19   | Course overview, The importance of research in advancing the counseling profession  
|         |        | Current research directions in rehabilitation counseling                | Koch et al. (2005)  
|         |        | Ethical and culturally relevant strategies for conducting research     | Lenz et al. (2014)  
|         |        |                                                                       | Tansey, Phillips, & Zanskas (2012)                                      |
| 2       | 1/26   | Identifying research topics, Conceptualizing research problems, Literature reviews | Baumeister & Leary (1997)  
|         |        |                                                                       | Chan, Chronister, & da Silva Cardoso (2009)  
|         |        |                                                                       | Dunn & Elliot (2008)  
|         |        |                                                                       | Haber (2010)                                                        |
| 3       | 2/2    | Research Question presentation and sharing— Special Ed students join  
<p>|         |        | Intro: How to critique research to inform counseling practice           | Schutz, Rivers, &amp; Ratusnik (2008)                                        | Come to class prepared to discuss your potential research question with handout for class (SpEd students will join) |
| 4       | 2/9    | Quantitative research designs - Between groups and within subject designs, Quasi-experimental and time series designs, Single-subject designs | Tate, Kalpakjian, &amp; Kwon (2008)                                        | Post two inspirational articles and prepare a summary handout for the class |
| 5       | 2/16   | Quantitative research designs continued - Between groups and within subject designs, Quasi-experimental and time series designs, Single-subject designs | Present Critical Review of “inspiring article” that is related to your interest (presentation and sharing with SpEd students) |</p>
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<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Notes</th>
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<tr>
<td>7</td>
<td>3/1</td>
<td>Sampling theory and data collection procedures, Measurement and measurement issues, Data screening</td>
<td>Meyers, Gamst, &amp; Guarino (2005) Vacha-Haase &amp; Thompson (2004)</td>
<td>Come prepared to discuss the research design and selection and characteristics of your participants (with handout)</td>
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<td>10</td>
<td>3/22</td>
<td>Spring Break</td>
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<tr>
<td>12</td>
<td>4/5</td>
<td>Present synthesis of reviews (presentations/ discussion with SpEd students)</td>
<td>Readings TBD</td>
<td>Present themes developed from the compilation of literature collected</td>
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<tr>
<td>Date</td>
<td>Activity</td>
<td>Instructor</td>
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<tr>
<td>13</td>
<td>4/12</td>
<td>SPSS tutorial – Fong Chan&lt;br&gt;Joined by SpEd students</td>
<td>Readings TBD&lt;br&gt;Bring laptops to class</td>
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<tr>
<td>15</td>
<td>4/26</td>
<td>Program Evaluation – presentation by Fong Chan&lt;br&gt;Formative and summative assessment</td>
<td>Practical Program Evaluation: Assessing and Improving Planning. Ch 1-3&lt;br&gt;Huey-tsyh Chen</td>
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### Theoretical perspectives

Counseling agency specific considerations

### Identifying consumer-provider benefits in evaluations of consumer-delivered services.

Salzer, Shear, & Liptzin 2005

| 16 | 5/3 | Program Evaluation Wrap up  
Professional research and publication  
Professional writing for journal and newsletter publication  
Professional conference proposal preparation  
Grant proposals and other sources of funding | Draft of Presenters’ Written Proposals | Final oral presentations of Research Proposals  
Readings as assigned  
American Counseling Association (ACA) podcasts – as assigned |
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<tr>
<td>Finals week</td>
<td>5/14</td>
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<td>DUE: Written Research Proposal</td>
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### Professional Work:

All assignments must be typed and use APA formatting for text, citations, and reference section. Part of your grade will be based on the professionalism of your written work including organization, grammar, spelling, and punctuation. Students who need assistance with their writing should contact the Writing Center [http://www.writing.wisc.edu](http://www.writing.wisc.edu).

### Attendance, preparedness, and participation:

Students will be allowed ONE unexcused absence without losing points. Further absences **may** be excused with written documentation or under extraordinary circumstances that are

### Students with Special Needs

The Department of Rehabilitation Psychology and Special Education is committed to a quality education for all students. This requires that we provide reasonable accommodation to students with disability. Federal law is clear on this matter and applies to all students with
disabilities. Students with disabilities or special circumstances who require accommodations (e.g. special seating, interpreter, note-taker, etc.) should inform the instructor as soon as possible so that we can work together to ensure your success in this course. You will need to provide the instructor with a copy of your VISA from the UW-Madison McBurney Disability Resource Center). Students with disabilities or circumstances requiring special accommodation should register with the UW-Madison McBurney Disability Resource Center to document need for accommodations and obtain necessary support services. The McBurney Disability Resource Center is located at 702 West Johnson, Suite 2104 and can also be reached by telephone or email (608-263-2741, 608-265-2998, fax; voice; 711 Relay; or 608-225-7956, text; email mcburney@wisc.studentlife.edu). See the McBurney Disability Resource Center website below for more information: www.mcburney.wisc.edu.

**Course Grades**

Your final grade will be determined by the number of points earned out of 100 possible points. *Please note that meeting the basic requirements of an assignment does not equal or guarantee an A. Please refer to UW-Madison grading that defines letter grades as following: A (excellent); AB (intermediate grade) B (good); BC (intermediate grade); C (fair); D (poor); F (failure).*

Research Problem/Questions 10 points  
Review of Research - Article Evaluation: 20 points  
Presentation of Research Proposal 25 points  
Research Proposal 40 points  
Program Evaluation assignment 10 points

**Total possible points: 100 points**

**Letter Grade Points Percentage**

A (excellent) 93-100%  
AB 88-92%  
B (good) 83-87%  
BC 78-82%  
C (fair) 73-77%

1. **Initial Research Problem/Questions 10 points (2-5 pages) - Due 2/2**

You will provide a written summary of 2 to 3 researchable problem areas you are interested in pursuing during the course. For each problem area, you will develop at least 2 researchable question(s).

Your assignment should include the following elements for each research problem: (a) description of the research problem; (b) at least 2 researchable questions that relate to the problem(s); (c) a conceptual or theoretical orientation within which your problem, issue, questions fit; (d) a brief description of why you are interested in these problems; and (e) why the answer to the questions are important to field of rehabilitation and will contribute new knowledge to the field; and. **You will share your questions and response above with the class and also provide feedback to others.**
2. Review of Research 20 points (2-3 pages) – Due 2/16

Students will be responsible for choosing an article that is a literature review of research in a peer-reviewed journal. You will choose the article in an area that is of broad interest the members and read the article critically prior to the class working session.

Develop a written summary of the topic area and results of your shared thoughts. You will present your summary to the class.

You will select and critically evaluate a peer-reviewed journal article that reports primary research and are related to your research problem(s) question(s). The evaluation should be in your own words. Summarize in writing in APA format addressing both elements under A and B. You will also present your results to the class.

1. Include an APA reference citation of the article at beginning of the summary.
2. Provide a brief summary of the article in your own words.
3. Under section A, are reflective questions for you to consider in your evaluation of the article For each question, consider, weigh, and then describe the strengths and weaknesses of the article.
4. under section B, are three additional ideas to address about the article.
5. In addition to your written work, prepare a 10 minute presentation that summarizes your written work above and pose two questions to your colleagues for feedback, further information you might like from your peers, or questions you might want help answering (for example, any issues, unknown answers about your research problem/questions that emerged from evaluating this article, questions you have about strategies/ processes to help you evaluate studies/ articles, help with next steps in a literature search on your problem/questions, questions about aspects of the article etc.). Please make handouts or a short ppt to facilitate your presentation.

A. Reflective Questions:

1. What is the articles/study's conceptual or theoretical orientation?
2. Does the article have a stated research question(s), hypotheses, or problem? That is, can you determine the focus of the study/article?
3. Is the article logically organized and easy to follow? What could have been done to improve its organization?
4. Does the article contain a section that outlines and reviews previous studies on this topic? In what ways is this previous work relevant to the research problem? Does the review provide a balanced view of the existing research on the area or problem? What would you do differently in this section to make it more relevant to the research problem/provide a balanced view or improve upon it in other ways?
5. Does the proposed research study follow logically from the literature review? Describe why or why not.
6. Identify and describe the research design used in the study. Is it appropriate to address the research problem/questions? Describe why or why not? What are the strengths and limitations of the design?

7. Are the procedures of the study clear enough that you could repeat the work and get similar results? Describe why or why not. What additional information might be helpful or essential for you to replicate the study?

8. How were data collected and analyzed. Do you agree with what was done? Why or Why not? What additional things might you do if you had been the researcher?

9. Do you agree with the conclusions and interpretation of the results? Do they follow logically from the results? Why or why not? Are the conclusions and interpretations warranted by the results? Why? Or Why not?

10. Finally, reflect over the entire article. What was most important about the article for you? What did you find most interesting? What do you think are the major strengths and weaknesses of the article? Will you keep this article to review for your research problem/questions? Why or Why not? What questions do you have about the article?

B. Note your ideas about the following aspects of the article:

1) Identify two implications for practice (that were not identified in the article)
2) Identify future research needs that remain for you (not identified in the study).
3) Identify an additional limitation to the study (not identified in the study)

3. Program Evaluation Exercise – 10 points (3-4 pages) Due 4/26

Using the format and questions UW WI Extension choose an agency you are familiar with to start populating the program evaluation document. We will discuss the process and findings in class on 4/19. Assignment specifics will be discussed in class.

4. Presentation of the Research Proposal 20 points – Due when presentation is made

You will prepare a ppt or other type of presentation (e.g. Prezi) of your research proposal.

Make sure to communicate your research problem/questions and situate it within the context of existing literature. Provide a summary of each of the components of the research proposal assignment. As this is a presentation, try to use visual representations of concepts and findings. The presentation should be no longer than 15 minutes. Your peers in the class will evaluate your presentation (content of the literature review and presentation aspects) and their evaluations will be considered in the final points awarded. You can use the feedback to facilitate completing your written proposal.

5. Written Research Proposal 50 points (20-30 pages including references/tables/figures) - Due first day of finals week
You will develop a research proposal from your articles/studies that addresses your research/topic question you have chosen based your literature review. A proposal typically contains the following parts that you will address in this assignment.

A. **Introduction (Literature Review)**. The purpose of the introduction is to introduce your proposed research problem on which you wish to conduct research. It should be clear by the end of the introduction that your question/hypothesis of your study is based on your review and findings of your studies. Your introduction should describe the context of where your proposed study fits within the context of prior research completed in the area. For example, what might be limitations of prior research? What changes may have occurred in practice or research that has not been addressed based on your review? This section should provide a rationale for the importance of your study and how your study has the potential to produce findings that will add to the research and knowledge base in your area. If you have a specific hypothesis vs. a research question, then identify what that is at the end of the introduction. Use the articles you reviewed and your initial literature review to facilitate completion of this section.

B. **Method**. In this section, you will need to select and describe your proposed research method (e.g., true experimental, quasi-experimental, and correlational). The type of research question and whether you are claiming a specific hypothesis should drive your research method. Another factor to consider may be feasibility of using a certain method (e.g. Can you really assign participants randomly?).

1. **Proposed Participants.** Describe the major demographic characteristics of your proposed research participants including any exclusion/inclusion criteria used for eligibility of participating in the study.

2. **Proposed Sampling Procedures**: Describe how you intend to select participants (e.g. Random, systematic sampling, convenience, critical case?). Describe the settings within which participants reside and where you intend to collect data.

3. **Proposed sample size.** Describe the number of participants you need in your study including how many may be in different groups (numbers within certain ethnic/race categories, gender). Consider if this will be enough for the purposes of your study (e.g., if you want to generalize or whether you have enough participants to do appropriate analyses).

4. **Proposed Measures/Data Collection Protocol.** Describe/define your proposed independent (predictor) and dependent (outcome-criteria) variables if appropriate.

Describe how you will measure your variables or what instruments you will use to obtain information on your research question/hypotheses data. If using known instruments, name them and provide their psychometric properties (e.g., reliability) and cite the source of the instrument.

5. **Proposed Research Design.** Describe your method with sufficient detail that one can understand the specific methods that will be used (e.g., don’t simply state Qualitative).

For example, will the study be case study (multiple-case study? critical case study?) An experimental between or within group design? A pre-post control group quasi experimental design? Describe your approach. For example, how will you place or assign participants into different groups (conditions), if appropriate to the design.
Depending on the type of design describe how you will address threats to internal and external validity and/or trustworthiness and credibility.

6. **Proposed Intervention** (if appropriate). Provide a description of the intervention that you are proposing (IF you are including one). Describe any new manipulations that you may be proposing if the intervention is based on an existing one.

7. **Procedures.** Describe what you will do and what participants will do in the study.

Including, the where and the how and how long these procedures are expected. For example, how will you collect data (e.g., observations, interviews). What will participants be expected to do?

C. **Anticipated Results.** Describe what data you will summarize and what you will compare in order to answer your research question or to test your hypothesis. You do not have to get into detail on statistical analysis. Describe the anticipated results you expect.

D. **Discussion.** Identify and describe at least 2 limitations you foresee in your study or research methodology, procedures, participant recruitment etc. that might limit the interpretation of results and the conclusions you can make. Discuss some strategies for how you might overcome these limitations or how other researchers could overcome these limitations. Describe at least 2 implications for practice or policy that you believe will be an outcome of the study.

E. **References.** All references cited in the body of the proposal should be included on separate page entitled References and these should be in APA format.