

**HHD 512: Research Methods in HHD**  
**Montana State University, Department of Health and Human Development**  
**Spring 2008**

**Course Description:**

This course is an examination of social science research principles and practices. The course will focus on teaching students to evaluate and apply research methods to various disciplines in the social sciences.

**Class Meetings:** 5:10 p.m. to 8:00 p.m., Tuesdays, Herrick Hall 117

**Instructor Information:**

Elizabeth Rink, PhD, MSW  
Assistant Professor  
Department of Health and Human Development  
Montana State University  
Office: Herrick Hall 318  
Mailbox: Herrick Hall 215  
Phone: 406.994.3833  
E-mail: elizabeth.rink@montana.edu

**Office Hours:** By Appointment

**Text:** Portney, L. & Watkins, M. (2008). *Foundations of Clinical Research: Applications to Practice*. 3<sup>rd</sup> Edition. Appleton & Lange: Stamford, Connecticut.

Other Readings as assigned.

**Learning Competencies:**

At the completion of this course, students will:

- Understand terminology and concepts related to qualitative and quantitative research methods.
- Understand the inherent limitations of social science research by becoming critical consumers of qualitative and quantitative research.
- Learn how to produce social science research by designing and conducting a small scale research study.
- Learn how to use Endnote to organize their research information.

**Instructor Expectations and Course Policies:**

- I expect that all course participants will respect the opinion and experience of other course participants.
- I expect that all course participants will be responsible for their own work.

- I expect that each of you will attend class sessions and read assigned readings so that you can be informed and actively participate in class discussions.
- I expect that, regardless of your research proclivities, you will become competent in understanding both qualitative and quantitative research methods.
- I follow and enforce the Montana State University guidelines for academic dishonesty.
- Emails will be responded to within 5 working days during the semester. To ensure a reply, please indicate “HHD 512” on the subject line of all e-mails sent to me.
- Exams are to be taken on the day and time assigned. Rescheduling of exams will be considered for emergency reasons only.
- Assignments are due by the beginning of the class period on the day the assignment is due. I *do not accept* late assignments. Students who do not turn in their assignments on the due date will be assigned a grade of “F”. In case of severe illness, a written medical excuse is required.
- Any form of engagement in electronic behavior during class (i.e. cell phones, text messaging, Ipods etc.) is not acceptable.
- There are *no opportunities* for extra credit in this course.

**Methods of Evaluation:**

The course grade will be based on the following 100 point scale:

|  |           |
|--|-----------|
| 2 exams at 20 points each  | 40 points |
| 1 group presentation on research methods   | 10 points |
| 1 article critique paper of three articles   | 10 points |
| 1 final research project   | 40 points |
| <i>(research project proposal is worth 10 points, rough draft of research project is worth 10 points, and final research project is worth 20 points)</i> |           |

The grading scale is:

|                     |    |
|---------------------|----|
| 94 points and above | A  |
| 90 to 93 points     | A- |
| 88 to 89 points     | B+ |
| 84 to 87 points     | B  |
| 80 to 83 points     | B- |
| 78 to 79 points     | C+ |
| 74 to 77 points     | C  |
| 70 to 73 points     | C- |
| 68 to 69 points     | D+ |
| 60 to 67 points     | D  |
| Below 60            | F  |

**Exams.** Two exams will be given in this course (One in class exam and one take-home final as outlined in the course schedule). The exams will be based on the course material covered to date. The second exam (the final) will be cumulative.

**Research Methods Presentation.** Students with work in groups of two or three to present a 10-minute presentation on the research methods used in their area of academic interest (*For example, forced sexual intercourse in martial relationships, obesity in children, diabetes among underserved populations, weight training among the elderly, depression in young adult women etc.*). Peer reviewed journals and research texts must be used for this presentation. Students must present the strengths and the weaknesses of the methods in their topic area with examples of the various methods used in their topic area. The presentation must be in Powerpoint format and turned into the instructor on the day on the group presentations.

**Critical Review of the Research.** One critical review paper will be due on the date outlined in the course schedule. The focus of the paper will be to critically review three research articles in the area of academic interest of your choice. The studies must be published in a peer review journal. Studies published on the internet are not acceptable. The paper must provide the following: 1) A brief outline of the research studies conducted; 2) The strengths and limitations of the research studies; and 3) Recommendations for strengthening the studies based on current research. The general requirements of the paper are the following:

- 10 pages in length (*excluding title page and references*).
- Typed, doubled-spaced, with 1 inch margins on all sides.
- Pages must be stapled in upper left-hand corner.
- Use Times New Roman (12 point) font.
- Include a title page that lists: your name, HHD 512, Spring 2008, and the title of the research study reviewed.
- Cite source material in the text and include a reference list. Citations in the text and the reference list must be prepared in the American Psychological Association (APA) as described in the publication manual of the APA (5<sup>th</sup> edition). The reference list is *not* included in the page requirements.
- Attach a copy of the research study you reviewed.
- *Do not* include any web-based/internet citations. If you download a journal article from the internet, you must give the full citation of the article, not the web site.
- Write well with thought, clarity and professionalism.

**Research Project.** A research project will be due on Tuesday April 22nd. Course participants will be expected to design a research project in a topic area of their choice *and* receive approval from the instructor for their course of inquiry. The research project must be one of the following: **Research Project #1)** A mixed methods research study using 10 subjects; or **Research Project #2)** A case study of a single subject which may involve up to three 1 to 1.5 hour interviews or a case study of a team or organization.

An outline of your research project will be due on *February 12<sup>th</sup>* and must include the following:

**Research Project #1 - Mixed Methods:** 1) your research question and hypothesis; 2) the purpose of your study; 3) the variables to be examined in your study; 4) data collection instruments to be used; and 5) data analyses methods.

**Research Project #2 – A Case Study:** 1) the subject's presenting problem; 2) the purpose of your study; 3) the variables to be examined in your study; 4) interviewing guide; and 5) data analysis methods.

**NOTE:** A copy of your Human Subjects Review Certification and a Institutional Review Board application **MUST** be attached to your research proposal that is due *February 12th*. Students who do not attach a copy of the Human Subjects Review Certification and Institutional Review Board application will receive a failing grade on their research project proposal. Students must also have a copy of an informed consent form that they have created to use in their project. A rough draft of your research project is due *April 1rst*.

The instructions for preparing the research project include the following:

- 20 to 30 pages in length (*excluding title page, references, and appendices*).
- Typed, doubled-spaced, with 1 inch margins on all sides.
- Pages must be stapled in upper left-hand corner.
- Use Times New Roman (12 point) font.
- Include a title page that lists: your name, HHD 512, Spring 2007, and the title of the research project.
- Cite source material in the text and include a reference list. Citations in the text and the reference list must be prepared in the American Psychological Association (APA) as described in the publication manual of the APA (5<sup>th</sup> edition). The reference list is *not* included in the page requirements.
- Place supporting research project materials in appendices (i.e. copy of questionnaire or survey).
- *Do not* include any web-based/internet citations. If you download a journal article from the internet, you must give the full citation of the article, not the web site.
- Write well with thought, clarity and professionalism.
- Content and Organization of the Research Proposal is as follows:

### **Research Project #1: Mixed Methods**

1. **Statement of the Research Problem:** Students must identify and describe the research problem. This section must include epidemiological and other data documenting the research problem. Students must provide a rational and justification for the study and the significance of the study in this section.
2. **Statement of the Purpose of the Study:** Students must identify the specific aims or objectives of the study as well as clearly state the research hypotheses to be examined in this study.
3. **Literature Review:** Students must provide a critical review of the research literature in their chosen topic area. The literature review must provide evidence that justifies the topic being researched.

4. Methods: Students must identify the population to be studied. This section should include the characteristics of the population, the sampling methods used in the study and plans for recruitment into the study. This section must include instrumentation used in the study and plans to establish reliability and validity in of the instrumentation. The methods section must include the study design, details of the instrumentation administration, data collection methods and data management and analysis.
5. Results: Students must present a frequency analysis of their quantitative results and if possible cross tabulations. Students must also present the results of their qualitative methods and how their qualitative questions were analyzed.
6. Discussion and Conclusion: Students must provide a well thought out discussion of their research findings, which includes: implications for future research, potential for further clinical investigation and implications for clinical practice.

### **Research Project #2: Case Study**

1. Statement of the Presenting Problem(s): Students must identify and describe the research problem(s). This section must include a full history of the research subject, delineating problem(s), symptoms, prior treatments, as well as demographic and social factors that are relevant to the subject's care and prognosis.
2. Statement of the Purpose of the Study: Students must identify the specific aims or objectives of the study as well as clearly state the research hypotheses to be examined in this study.
3. Literature Review: Students must provide a critical review of the research literature that relates to the subject's presenting problem(s). The literature review must provide evidence that justifies the topic being assessed.
4. Methods: This section must include instrumentation used in the study and plans to establish reliability and validity of the instrumentation. The methods section must include the study design, details of the instrumentation administration, data collection methods and data management and analysis.
5. Results: Students must present the results of their qualitative methods.
6. Treatment/Intervention Plan and Justification: Students must present a treatment plan for their subject and justification for their treatment/intervention approach based on the results of their case study and the current research in their topic area.
7. Discussion and Conclusion: Students must provide a well thought out discussion of their research findings, which includes: implications for future research, potential for further clinical investigation and implications for clinical practice.

## COURSE SCHEDULE

| DATE  | TOPIC   | ASSIGNMENT   |
|---|---|--|
| <b>WEEK 1</b><br>Tuesday, Jan. 22                             | Introductions and Expectations<br>Foundations of Clinical Research<br>Communication and Research<br>Ethics and Research | Chapters 1- 3 and 29 - 31                                      |
| <b>WEEK 2</b><br>Tuesday, Jan. 29                             | Concepts of Measurement   | Chapters 4 - 6   |
| <b>WEEK 3</b><br>Tuesday, Feb. 5                              | Library Instruction   | <b>Meet in the Library in Room 15 in the Basement</b>          |
| <b>WEEK 4</b><br>Tuesday, Feb. 12                             | Designing Clinical Research: Part I   | Chapters 7 - 16<br><b>Research Project Proposal Due</b>        |
| <b>WEEK 5</b><br>Tuesday, Feb. 19                             | Designing Clinical Research: Part II  | Chapters 7 - 16  |
| <b>WEEK 6</b><br>Tuesday, Feb. 26                             | <b>Group Presentations</b>  | <b>Powerpoint Presentation Due</b>                             |
| <b>WEEK 7</b><br>Tuesday, Mar. 4                              | <b>Midterm</b>  |  |
| <b>WEEK 8</b><br>Tuesday, Mar. 11                             | <b>Spring Break – No Class</b>  |  |
| <b>WEEK 9</b><br>Tuesday, Mar. 18                             | Qualitative Research Methods: Part I  | Assigned Readings<br><b>Article Critiques Due</b>              |
| <b>WEEK 10</b><br>Tuesday, Mar. 25                            | Qualitative Research Methods: Part II   | Assigned Readings  |
| <b>WEEK 11</b><br>Tuesday, Apr. 1                             | Quantitative Data Analysis<br>Social Statistics: Part I   | Chapters 17 – 28<br><b>Rough Draft of Research Project Due</b> |
| <b>WEEK 12</b><br>Tuesday, Apr. 8                             | Quantitative Data Analysis<br>Social Statistics: Part II  | Chapters 17 - 28   |
| <b>WEEK 13</b><br>Tuesday April 15                            | Quantitative Data Analysis<br>Social Statistics: Part III   | Chapters 17 - 28   |
| <b>WEEK 14</b><br>Tuesday, April 22                           | Course Review   | <b>Research Project Due</b>                                    |
| <b>Take Home Final Exam Due<br/>Friday April 25th at Noon</b> |   |  |