

RMTD 400: INTRODUCTION TO RESEARCH METHODOLOGIES

Fall 2010
Online Version

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Online Office Hours:	Wednesdays, 3 – 4:30 pm	

Required Text: Johnson, R., B., & Christensen, L., (2005). *Educational Research: Quantitative, Qualitative, and Mixed Approaches 2nd ed*, Boston, MA: Allyn and Bacon.

Recommended Text: American Psychological Association. (2001). *Publication manual of the American Psychological Association (6th ed.)*. Washington, D.C.

Additional readings will be provided by the instructor and posted on Blackboard.

Course Description: This course will utilize the online resource of Blackboard to introduce the concept of inquiry and research methods used in education, psychology, and other social sciences. The course will cover three main methods of inquiry: Quantitative, Qualitative and Mixed Methods.

School of Education's Conceptual Framework:

The School of Education at Loyola University Chicago, a Jesuit and Catholic urban university, supports the Jesuit ideal of knowledge in the service of humanity. We endeavor to advance professional education in the service of social justice, engaged with Chicago, the nation, and the world. To achieve this vision the School of Education participates in the discovery, development, demonstration, and dissemination of professional knowledge and practice within a context of ethics, service to others, and social justice. We fulfill this mission by preparing professionals to serve as teachers, administrators, psychologists, and researchers; by conducting research on issues of professional practice and social justice; and by partnering with schools and community agencies to enhance life-long learning in the Chicago area. This course will equip students with the knowledge, skills of inquiry, and ethics necessary to be professional and socially just researchers. The case studies used in this course illustrate how educational research can illuminate issues of social justice. In addition, the research methods used in this course also add to students' ability to understand the diversity of perspectives that researchers use to address social problems.

SOE Conceptual Framework Standards Addressed in this Course:

- CF #4: Candidates demonstrate skills that will enable them to work effectively with diverse clients.
- CF #8: Candidates apply ethical principles in professional decision-making.

Course Objectives: As a result of this course, students will be able to:

- Discuss the philosophical underpinnings of educational research and describe the applications of the scientific method
- Explain the difference between quantitative, qualitative and mixed methods research paradigms
- Explain the difference between various research methods used in educational research
- Discuss the relationships between theory, research objective, research question, design, measurement, and analysis
- Select a research topic, state a research objective and research question.
- Conduct a review of relevant literature that synthesizes the knowledge from several research studies around the central idea or research question including identifying the existing gaps in the literature.
- Analyze and evaluate the research questions, design, ethics and conclusion of existing educational research
- Describe and determine the correct use of different sampling techniques to answer a research question.
- Describe the measurement and data collection procedures including instrumentation and methods for determining reliability and validity. Determine the correct data collection techniques to answer a research question.
- Describe the types of quantitative and qualitative validity and methods for establishing them.
- Discuss the logic of experimental control.
- Discuss the descriptive statistical methods for representing data.
- Discuss issues around testing for statistical significance
- Discuss the legal and ethical issues in educational research.
- Effectively engage in an online learning community.

Course requirements: Below describes the different point values associated with each assignment:

Point break down:

Modules	50 points each (X 4)	200 points
Critical analysis/summaries	50 points each (X 2)	100 points
Literature review	200 points	200 points
Class participation	100 points	100 points
Homepage	10 points	
Academic Honesty Policy	10 points	
Group meeting	10 points	
Library session	10 points	
Group discussions	60 points	

Total

600 points

Description of breakdown:

Modules: During the course of the semester, you will complete four modules. Each module will consist of series of questions or activities related to the information presented in class and the readings.

Critical analysis/summaries: Each student will complete both a critical analysis and summary of two journal articles. A more detailed description of what is expected will be presented online after the assignment has been given.

Mini literature review: This section will constitute the largest portion of your grade. Each student will present a literature review on a topic of their choosing.

*Although your proposal is not due until the end of the semester you will need to work on it throughout the semester in order to develop a quality product. It is implied that you are working on your proposal all semester long. Students are encouraged to speak with their group members about the review via the discussion board throughout the semester.

Class participation: Class participation will consist of a number of different aspects. A more detailed description of what is required is available online, however, each student will participate in weekly discussion threads with other students in the class.

Student homepage: A portion of your participation grade will be based on the completion of a student blackboard homepage. This will consist of a brief description of yourself, your research interests, and a current picture. The homepage will help you connect with your fellow classmates.

Group meeting: At the beginning of the semester, you and your group will meet at a central location. More about this assignment will be available online.

Library session: Sometime during the first month of class, two informative library sessions will be available and your attendance is required at one of them. The dates of these sessions will be announced during the first week of class.

Group discussion: The largest portion of your participation grade will reside from group discussions. Points will be awarded based on your contributions to the group discussions. These discussions need to be documented. Thus, they can take place on the discussion board that will be assigned to each group, or can be done through conference call as long as the highlights of the discussion are posted. More information will be forthcoming about how the discussion groups will be formed.

Assignment due dates: Tentative due dates for assignments are listed on the course calendar – these may change due to the scheduling of the library session. Please note that Critical Analysis 2 will serve as an assessment of Conceptual Framework standard #4, Diversity, and Module 4 will serve as an assessment of Conceptual Framework standard #8, Application of Ethical Principles. The rubrics for these assessments are given at the end of this syllabus.

Late Work: Late work will not be accepted unless prior arrangements have been made with the instructor. Note that for individual assignments, you will not be able to submit your paper after 11:59 pm on the due date. Unlike traditional live taught classes, the option of turning in work late is not feasible because of rigid time

constraints. As such, if a situation occurs and the need to turn in work late presents itself, it is imperative that the student contact the instructor immediately. Late assignments will automatically be worth only **half of their original point value**.

Online Course Requirements:

From reading this syllabus it should be clear that the online classroom differs from the live-taught. As such, there are certain expectations and guidelines we must follow in order to ensure academic achievement. The following describes an explicit however non-exclusive list of expectations to ensure a successful semester:

Required Access

Access to (at least) a DSL Internet connection
Loyola Email Account with reliable access

Required Familiarity

Be able to download and attach files
Create and open a Zip File
Microsoft Office Package
 Microsoft Word
 Microsoft Excel
 Microsoft PowerPoint

Access to Software – All are available for free download if needed this semester.

Adobe Flash Player
Adobe Reader
Adobe Shockwave
Horizon Wimba Live - a fully-featured, live, virtual classroom solution that includes audio, video, application sharing and content display.
Java Software
QuickTime
RealPlayer

In addition to hardware access and software utilization, the following represent factors that facilitate a productive and effective online learning experience.

(Material adapted from the University of Wisconsin Online website on Online Etiquette. <http://online.uwc.edu/technology/Etiquette.asp>)

- *Tone down your language.* Given the absence of face-to-face clues, written text can easily be misinterpreted. Avoid the use of strong or offensive language and the excessive use of exclamation points. If you feel particularly strongly about a point, it may be best to write it first as a draft and then to review it, before posting it, in order to remove any strong language.
- *Keep a straight face.* In general, avoid humor and sarcasm. These frequently depend either on facial or tone of voice cues absent in text communication or on familiarity with the reader.
- *Be forgiving.* If someone states something that you find offensive, mention this directly to the instructor. Remember that the person contributing to the discussion is also new to this form of communication. What you find offensive

may quite possibly have been unintended and can best be cleared up by the instructor.

- *The recorder is on.* Think carefully about the content of your message before contributing it. Once sent to the group, there is no taking it back. Also, although the grammar and spelling of a message typically are not graded and they do reflect on you; your audience might not be able to decode misspelled words or poorly constructed sentences. It is a good practice to compose and check your comments in a word-processor before posting them.
- *Test for clarity.* Messages may often appear perfectly clear to you as you compose them, but turn out to be perfectly obtuse to your reader. One way to test for clarity is to read your message aloud to see if it flows smoothly. If you can read it to another person before posting it, then even better.
- *Netspeak.* Although electronic communication is still young, many conventions have already been established. DO NOT TYPE IN ALL CAPS. This is regarded as shouting and is out of place in a classroom. Acronyms and emoticons (arrangements of symbols to express emotions) are popular, but excessive use of them can make your message difficult to read.

***Course calendar: Fall 2010 - TENTATIVE**

Week	Topic Area	Readings due this week	Assignments due (the following Monday)	Group Assignments
1	Introduction to course- Discussion of assignments and requirements		Homepage	Meet with group
2	Research Paradigms, Research Problems, Research Questions	Chapter 1 & 2		2 nd chance to meet with group
TBA	Library Meeting			Discussion on Research Question
4	Literature reviews Literature search	Chapter 3	Module 1	
5	Qualitative and Quantitative validity	Chapter 10		Discussion of Chapter 1* defining the research problem
6	Experimental Research and Quasi Experimental designs	Chapters 11 & 12	Module 2	
7	Non experimental designs	Chapter 13		Discussion of Chapter 2*- Literature review

8	Qualitative designs	Chapter 14	Critical analysis 1	
9	Qualitative and Mixed Method research			Discussion of Chapter 3* Methods section
10	Measurement/Assessment and Data Collection	Chapters 6 - 8		Discussion
11	Sampling	Chapter 9	Module 3	
12	Ethics in research	Chapter 5	Critical analysis 2	
13	Descriptive statistics	Chapter 17		Discussion
14	Qualitative analysis Discussion about proposals	Chapter 19	Module 4	
Apr 27	Class Wrap up, course evaluation and turn in proposal		Literature Review	

This calendar is subject to revision depending upon time constraints, instructor preference, and student interests

SOE ACADEMIC POLICIES

Academic Honesty

Academic honesty is an expression of interpersonal justice, responsibility and care, applicable to Loyola University faculty, students, and staff, which demands that the pursuit of knowledge in the university community be carried out with sincerity and integrity. The School of Education's Policy on Academic Integrity can be found at:

http://www.luc.edu/education/academics_policies_integrity.shtml

For additional academic policies and procedures refer to:

http://www.luc.edu/education/academics_policies_main.shtml

Accessibility

Students who have disabilities which they believe entitle them to accommodations under the Americans with Disabilities Act should register with the Services for Students with Disabilities (SSWD) office. To request accommodations, students must schedule an appointment with an SSWD coordinator. Students should contact

SSWD at least four weeks before their first semester or term at Loyola. Returning students should schedule an appointment within the first two weeks of the semester or term. The University policy on accommodations and participation in courses is available at:

<http://www.luc.edu/sswd/>

Harassment (Bias Reporting)

It is unacceptable and a violation of university policy to harass, discriminate against or abuse any person because of his or her race, color, national origin, gender, sexual orientation, disability, religion, age or any other characteristic protected by applicable law. Such behavior threatens to destroy the environment of tolerance and mutual respect that must prevail for this university to fulfill its educational and health care mission. For this reason, every incident of harassment, discrimination or abuse undermines the aspirations and attacks the ideals of our community. The university qualifies these incidents as incidents of bias.

In order to uphold our mission of being Chicago's Jesuit Catholic University-- a diverse community seeking God in all things and working to expand knowledge in the service of humanity through learning, justice and faith, any incident(s) of bias must be reported and appropriately addressed. Therefore, the Bias Response (BR) Team was created to assist members of the Loyola University Chicago community in bringing incidents of bias to the attention of the university. If you believe you are subject to such bias, you should notify the Bias Response Team at this link:

<http://webapps.luc.edu/biasreporting/>

Technology

This course is designed as an online course, and thus, students are expected to know how to use Blackboard and its features, be able to navigate the internet to explore resources, and to use the electronic resources available through LUC's library homepage.

Diversity

The School of Education is committed to diversity including but not limited to race, gender, sexual orientation, social class, ethnicity, and ability. Through this course, students will learn how to interpret and critique fundamental research methods used in the social sciences. The course is designed to provide students with the knowledge necessary to evaluate research concerning the social dimensions mentioned above.

Research Methodology Masters Program Core Assessment

Course: RMTD 400 – Introduction of Research Methodologies
 Core Assessment: Critical analysis of a research study
 CF Standard: 4

For this core assessment, each student will identify a research article related to an area of the student’s interest. The purpose of this assessment is to demonstrate an understanding of the research methodology used in the study, and assess the results. Students are expected to include both a summary and a critical review of the article that discusses elements, such as the following:

1. Purpose of the study
2. Methodology (e.g., case study, ethnography, grounded theory, phenomenological study)
3. Research methods (e.g., interviews, observations, document analysis)
4. Sampling (e.g., purposive)
5. Role of the researcher
6. Data interpretation and analysis

Core Assessment Rubric

Conceptual Framework Standard	Target	Acceptable	Unacceptable
CF4: Candidates demonstrate an understanding of the diversity of research methodologies used in educational research.	The research article critique clearly represents an understanding of the research methodology employed in the study. The research paper weaves together the summary and analysis of the article supporting claims with sufficient evidence from the article.	The research article critique demonstrates a good understanding of the research methodology used in the study. The research paper attempts an integration of the summary and analysis with some evidence provided for claims.	The research article critique presents a limited understanding of the research methodology used in the study. The research paper does not successfully integrate the summary and analysis of the article, and/or provides little supporting evidence for claims.

Research Methodology Masters Program Core Assessment

Course: RMTD 400 – Introduction of Research Methodologies
 Core Assessment: Essay on research ethics
 CF Standard: 8

For this core assessment, the student will read an article or case study provided by the instructor that addresses an aspect of research ethics. One example is the following:

Please read the New York Times Magazine article from November 28, 1999, entitled, "The biotech death of Jesse Gelsinger." In a 2-3 page essay, please address the following questions.

- a. How would you assess the ethics of this study given the Belmont Report principles of respect for persons, beneficence and justice? This report can be read online at <http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.htm>
- b. A major criticism of the trial that resulted in Jesse's death centers on the informed consent procedures. What is your assessment of the informed consent procedures? If you were in Jesse's place, what information and procedures would you demand before you volunteered for a trial?
- c. The medical ethicist of this research project would not allow infants as subject in this experiment because parents could not freely give consent knowing that their infant had only a few hours to live. What is your opinion of this decision? How would you argue your case?

Core Assessment Rubric

Conceptual Framework Standard	Target	Acceptable	Unacceptable
CF8: Candidates demonstrate an understanding of the major principles of research ethics in research with human subjects.	The essay clearly represents an understanding of the principles of the Belmont report: respect for persons, beneficence, and justice. The essay assesses the ethical issues present in the case study, and provides a clear and well-supported argument for its claims.	The research article critique demonstrates a good understanding of the principles of the Belmont report: respect for persons, beneficence, and justice. The essay addresses some of the ethical issues present in the case study, and provides some support for its claims.	The research article critique presents a limited understanding of the principles of the Belmont report: respect for persons, beneficence, and justice. The essay partially addresses the ethical issues present in the case study, and provides little or no support for its claims.