

CPSE 629 - Introduction to Research - Winter 2020

Section 001: 331 MCKB, Thu, 1:00 pm - 3:50 pm

Instructor Information

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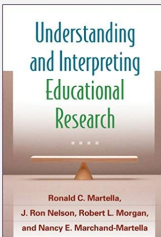

Office Hours: Thu 4:00pm-5:00pm; or By Appointment

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Course Description

Introduction to the design options available for conducting basic and applied educational research and how to read and write research reports. Quantitative, qualitative, and program evaluation along with ideas for protecting human subjects will be discussed.

Materials

Item	Price (new)	Price (used)
	Understanding & Interpreting Educational Research <i>Required</i> by Martella, R	85.00 65.25
	Publication Manual of APA 7E <i>Required</i> by Am Psych Assoc	40.55 30.45

Learning Outcomes

Understand Major Research Approaches: To help students understand the major educational research approaches and their conceptual underpinnings.

Critical Thinking: To help students think critically about research as a producer and a consumer.

Research Ethics: To help students understand the nature of research ethics and institutional review processes.

Learning Objectives

This course is designed to help you:

- (1) Better develop your ability to read, understand, and evaluate research that is relevant to your professional work.
- (2) Gain knowledge, skills, and abilities needed both to: (a) design and conduct research and program evaluations of your own and (b) pass national licensing examinations.
- (3) Prepare your thesis or dissertation proposal.

Grading Scale

Grades	Percent
A	93%
A-	90%
B+	87%
B	83%
B-	80%
C+	77%
C	73%
C-	70%
D+	67%
D	63%
D-	60%
E	0%

Grading Policy

Students receive the grade earned and are not graded on a curve. Late work is penalized 10% per day late. Some assignments occur in class and require class attendance. Please contact the professor in advance in case of absence due to personal circumstances.

Participation Policy

Students are expected to participate in class, complete out of class readings and assignments, and meaningfully contribute to class learning and discussions. Students use of laptop computers and other technology during class time are for course-related work only (note-taking, etc.) and are not to be used for personal purposes (email, web surfing, completing assignments for other classes, etc.) as such behavior is distracting, inhibits class discussions, and is disrespectful to presenters - please reserve such personal activity for before or after class.

Attendance Policy

Students are expected to attend each class and be on time. Please notify the professor in the case of anticipated absences or lateness.

Classroom Procedures

We will begin each class period with a spiritual message and prayer to help invite the Spirit into our meeting. We engage in presentations and discussions of the weekly readings and student research/evaluation projects. The class will include time to meet in

groups and participate in applied learning activities. We may occasionally have guest speakers.

Study Habits

You will be most successful in this course if you keep up on chapter readings and course assignments. Participating in study groups with your peers will facilitate your performance in the class. Getting frequent feedback on your research proposal from peers, your chair, and others should also facilitate your course performance. Please let me know at any time if you need assistance - I am here to help you.

Teaching Philosophy

Over the course of my career teaching at both the graduate and undergraduate levels, I have realized the importance of designing courses to ensure that students take an active role in the course and learn by doing. In general, I do not believe that professors lecturing always fosters student learning. Researchers across academic disciplines have also questioned the merits of the lecture as the main method of imparting knowledge in university classrooms. Students who idle passively in lecture halls have described their experience as the tediousness that the student body goes through between weekends. Critics of the lecture format strongly support the notion that educators encourage students to actively involve themselves in their own learning.

Learning by doing pertains to students' interaction with course content in multiple ways. Students who interact with class material cognitively and behaviorally retain information, transfer knowledge to novel situations, and develop higher-order thinking skills better than students who only attend lecture classes. Moreover, practical benefits can arise from active learning strategies including a decrease in student attrition, as well as increased student commitment and intent to return to their institution if they drop out.

Given my past teaching experiences, as well as findings from the literature, I encourage students to actively involve themselves in their learning. My goal in teaching is to help students learn by doing on multiple levels. There are several ways I try to accomplish this; incorporating self-directed learning, using primary works, using technology in the classroom, including student co-teaching opportunities, and assigning applied homework.

Assignments

Learning Activities: It is essential that you come to class having completed the assigned readings to be able to participate effectively in class discussions and activities. During class, a learning activity will occur related to the assigned readings and in-class discussions from the previous week. These will be interactive exercises or quizzes. If students miss these activities it is not possible to make them up, as they involve group interaction and discussion.

Research Group Time: I will assign you to a group that you will meet with weekly to work on your research project. It is hoped that group members will provide helpful feedback, encouragement, and ideas for each other's research projects. I will also be available during this time to offer my help and suggestions as well.

Steps to Completing your Research Proposal: You are required to provide a minimum of 1 new page of writing on your research proposal each week. Please upload this to Learning Suite before class. Each week there is a step to help complete your

research proposal. Because I want this class to meet your needs, if you do not feel ready to complete a particular step, or if you feel that you are already beyond this point, you are welcome to email me to propose an alternate assignment that better aligns to where you are with the proposal process.

Best Practice Standards: There are best practice standards for the various designs available for use in research and evaluation projects. For this assignment, your task is to locate a journal article, a book or book chapter (other than our textbook), or a technical document from a trusted source (government agency, professional organization, etc.) that highlights agreed upon design standards for the type of research or evaluation project you are planning to conduct. Please let me know if you have questions about which source(s) to use to evaluate your proposed project - your thesis or dissertation chair should also be able to help you. Your job is to review these standards to learn more about the design requirements for these types of projects and then critically apply them to the research or evaluation project you are planning to carry out.

- For qualitative designs, the article by Brantlinger and colleagues (2005) entitled “Qualitative studies in special education” is a good source.
- For single subject designs, Horner and colleagues (2005) article “The use of single-subject research to identify evidence-based practice in special education” may be appropriate.
- For group designs, Gersten and colleagues (2005) article “Quality indicators for group experimental and quasi-experimental research in special education” could work well.
- For internet surveys, Eysenbach’s (2004) article “Improving the quality of Web surveys: the Checklist for Reporting Results of Internet E-Surveys (CHERRIES)” may be appropriate.
- For scale development using EFA and CFA, Worthington and Whittaker’s (2006) article “Scale development research: A content analysis and recommendations for best practices” could work.

You are to create a two to three page APA formatted summary, first listing the standards you used. Next, review each standard and describe how your project meets or does not meet each standard. Finally, describe ways you could strengthen your design to better meet these standards, or tell the reader why you will be unable to meet the standard. You may also discuss this with other class members.

Research Proposal Poster: To help you gain experience preparing and presenting research posters, you are required to create a poster with the basic components of your research proposal; title, literature review highlights, methods section. You will upload these posters electronically to Learning Suite. You are not required to print them out. We will spend time in class reviewing these posters in groups. I have attached some sample poster proposals to serve as a guide. Your posters may also be presented at the MSE research poster session occurring the following week. I have included sample posters on learning suite. Below are the criteria (up to 3 points each) which will be used to grade the posters:

1. Research goal clearly stated. (Includes specific research questions addressed.)
2. Brief context given. (A brief literature review that shows why research is of interest and how the research question advances what is already known.)

3. Method (How the study was designed to produce data. Involves reasoning from a theoretical base to the construction of materials used in research, research design, and a plan for data collection.)
4. Description of how the data will be/was analyzed. (Analysis may vary depending on the type of research e.g., quantitative-statistical analysis, single-subject-visual analysis, qualitative or action research –combination of quotes or evidence from the data and what the quotes or evidence mean.)
5. Explanation of results expected/obtained from the data analysis.
6. Discussion/description of what will be/was learned from the research and implications/limitations.
7. Overall poster clarity.
8. Visual Appeal.

Final Score _____/24

Comments:

Written Research Proposal: You are required to develop a 20 (min) to 30 (max) page APA formatted research paper/proposal on a topic of your choice (see sample research proposals on learning suite). You will develop a stronger understanding of educational research by creating a proposal while studying the chapters in our text. The purpose of this assignment is not to require you to create a full-blown thesis or dissertation proposal – that is something you will do working with your chair and committee. Rather, the intent is to help you produce a draft proposal, containing key elements of a research proposal, but with the advantage that it can be revised quickly as you get new ideas or respond to feedback from others. Furthermore, because it does not require as much effort, you will find it easier to abandon if you develop a new research problem that you find more compelling and doable. I have attached sample completed research proposals on learning suite to help guide you.

Research Study Presentation: For this assignment, you are required to lead a 20-30 min presentation/discussion on an original, peer-reviewed, research study of your choice that relates to your proposed research topic. You are required to email a copy of the study to Dr. Caldarella by 4:00 pm on the class period the week before you are scheduled to present, so that he may review it and post it on learning suite for students to read.

Extra Credit

Complete the end of semester course rating: You can earn 3 extra credit points by completing the end of semester course rating by April 9th, the last day of class.

Attend a guest researcher presentation: For 3 extra credit points, and to help you learn about methodology from expert researchers who come to campus, you may attend one of the presentations made by BYU McKay School of Education guest researchers which occur regularly during the semester. These guest researcher presentations are often posted on the main doors of the college and sent via email to students. I will also try to announce such opportunities in class. You are required to submit a 1-page summary highlighting (a) who the researcher was, (b) what the presentation was about, (c) the methods used by the researcher, (d) the strengths and weaknesses of the research, and (e) what you learned from attending the presentation.

University Policies

Honor Code: In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and every instructor's expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

Preventing Sexual Misconduct: In accordance with Title IX of the Education Amendments of 1972, Brigham Young University prohibits unlawful sex discrimination against any participant in its education programs or activities. The university also prohibits sexual harassment-including sexual violence-committed by or against students, university employees, and visitors to campus. As outlined in university policy, sexual harassment, dating violence, domestic violence, sexual assault, and stalking are considered forms of "Sexual Misconduct" prohibited by the university.

University policy requires all university employees in a teaching, managerial, or supervisory role to report all incidents of Sexual Misconduct that come to their attention in any way, including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Incidents of Sexual Misconduct should be reported to the Title IX Coordinator at t9coordinator@byu.edu or (801) 422-8692. Reports may also be submitted through EthicsPoint at <https://titleix.byu.edu/report> or 1-888-238-1062 (24-hours a day).

BYU offers confidential resources for those affected by Sexual Misconduct, including the university's Victim Advocate, as well as a number of non-confidential resources and services that may be helpful. Additional information about Title IX, the university's Sexual Misconduct Policy, reporting requirements, and resources can be found at <http://titleix.byu.edu> or by contacting the university's Title IX Coordinator.

Student Disability: Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability which may impair your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 422-2767. Reasonable academic accommodations are reviewed for all students who have qualified, documented disabilities. The UAC can also assess students for learning, attention, and emotional concerns. Services are coordinated with the student and instructor by the UAC. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures by contacting the Equal Employment Office at 422-5895, D-285 ASB.

Academic Honesty: The first injunction of the Honor Code is the call to "be honest." Students come to the university not only to improve their minds, gain knowledge, and develop skills that will assist them in their life's work, but also to build character. "President David O. McKay taught that character is the highest aim of education" (The

Aims of a BYU Education, p.6). It is the purpose of the BYU Academic Honesty Policy to assist in fulfilling that aim. BYU students should seek to be totally honest in their dealings with others. They should complete their own work and be evaluated based upon that work. They should avoid academic dishonesty and misconduct in all its forms, including but not limited to plagiarism, fabrication or falsification, cheating, and other academic misconduct.

Deliberation Guidelines: To facilitate productive and open discussions about sensitive topics about which there are differing opinions, members of the BYU community should: (1) Remember that we are each responsible for enabling a productive, respectful dialogue. (2) To enable time for everyone to speak, strive to be concise with your thoughts. (3) Respect all speakers by listening actively. (4) Treat others with the respect that you would like them to treat you with, regardless of your differences. (5) Do not interrupt others. (6) Always try to understand what is being said before you respond. (7) Ask for clarification instead of making assumptions. (8) When countering an idea, or making one initially, demonstrate that you are listening to what is being said by others. Try to validate other positions as you assert your own, which aids in dialogue, versus attack. (9) Under no circumstances should an argument continue out of the classroom when someone does not want it to. Extending these conversations beyond class can be productive, but we must agree to do so respectfully, ethically, and with attention to individuals' requests for confidentiality and discretion. (10) Remember that exposing yourself to different perspectives helps you to evaluate your own beliefs more clearly and learn new information. (11) Remember that just because you do not agree with a person's statements, it does not mean that you cannot get along with that person. (12) Speak with your professor privately if you feel that the classroom environment has become hostile, biased, or intimidating. Adapted from the Deliberation Guidelines published by The Center for Democratic Deliberation. (<http://cdd.la.psu.edu/education/The%20CDD%20Deliberation%20Guidelines.pdf/view?searchterm=deliberation%20guidelines>)

Inappropriate Use Of Course Materials: All course materials (e.g., outlines, handouts, syllabi, exams, quizzes, PowerPoint presentations, lectures, audio and video recordings, etc.) are proprietary. Students are prohibited from posting or selling any such course materials without the express written permission of the professor teaching this course. To do so is a violation of the Brigham Young University Honor Code.

Mental Health Concerns: Mental health concerns and stressful life events can affect students' academic performance and quality of life. BYU Counseling and Psychological Services (CAPS, 1500 WSC, 801-422-3035, caps.byu.edu) provides individual, couples, and group counseling, as well as stress management services. These services are confidential and are provided by the university at no cost for full-time students. For general information please visit <https://caps.byu.edu>; for more immediate concerns please visit <http://help.byu.edu>.

Plagiarism: Intentional plagiarism is a form of intellectual theft that violates widely recognized principles of academic integrity as well as the Honor Code. Such plagiarism may subject the student to appropriate disciplinary action administered through the university Honor Code Office, in addition to academic sanctions that may be applied by an instructor. Inadvertent plagiarism, which may not be a violation of the Honor Code, is nevertheless a form of intellectual carelessness that is unacceptable in the academic community. Plagiarism of any kind is completely contrary to the established practices of

higher education where all members of the university are expected to acknowledge the original intellectual work of others that is included in their own work. In some cases, plagiarism may also involve violations of copyright law. Intentional Plagiarism-Intentional plagiarism is the deliberate act of representing the words, ideas, or data of another as one's own without providing proper attribution to the author through quotation, reference, or footnote. Inadvertent Plagiarism-Inadvertent plagiarism involves the inappropriate, but non-deliberate, use of another's words, ideas, or data without proper attribution. Inadvertent plagiarism usually results from an ignorant failure to follow established rules for documenting sources or from simply not being sufficiently careful in research and writing. Although not a violation of the Honor Code, inadvertent plagiarism is a form of academic misconduct for which an instructor can impose appropriate academic sanctions. Students who are in doubt as to whether they are providing proper attribution have the responsibility to consult with their instructor and obtain guidance. Examples of plagiarism include: Direct Plagiarism-The verbatim copying of an original source without acknowledging the source. Paraphrased Plagiarism-The paraphrasing, without acknowledgement, of ideas from another that the reader might mistake for the author's own. Plagiarism Mosaic-The borrowing of words, ideas, or data from an original source and blending this original material with one's own without acknowledging the source. Insufficient Acknowledgement-The partial or incomplete attribution of words, ideas, or data from an original source. Plagiarism may occur with respect to unpublished as well as published material. Copying another student's work and submitting it as one's own individual work without proper attribution is a serious form of plagiarism.

Respectful Environment: "Sadly, from time to time, we do hear reports of those who are at best insensitive and at worst insulting in their comments to and about others... We hear derogatory and sometimes even defamatory comments about those with different political, athletic, or ethnic views or experiences. Such behavior is completely out of place at BYU, and I enlist the aid of all to monitor carefully and, if necessary, correct any such that might occur here, however inadvertent or unintentional. "I worry particularly about demeaning comments made about the career or major choices of women or men either directly or about members of the BYU community generally. We must remember that personal agency is a fundamental principle and that none of us has the right or option to criticize the lawful choices of another." President Cecil O. Samuelson, Annual University Conference, August 24, 2010 "Occasionally, we ... hear reports that our female faculty feel disrespected, especially by students, for choosing to work at BYU, even though each one has been approved by the BYU Board of Trustees. Brothers and sisters, these things ought not to be. Not here. Not at a university that shares a constitution with the School of the Prophets." Vice President John S. Tanner, Annual University Conference, August 24, 2010

Weekly Schedule*

Date	Class Number	Assigned Chapters
Th Jan 9	Class 1 - Introductions, Review Syllabus, Assignment to Research Groups	Chapter 1: Thinking Critically About Research
Th Jan 16	Class 2	Chapter 2: Fundamental Issues for Interpreting Research
Th Jan 23	Class 3	Chapter 3: Reliability, Validity, and Interobserver Agreement
Th Jan 30	Class 4	Chapter 9: Basic Understandings in Qualitative Research
Th Feb 06	Class 5	Chapter 10: Data Collection and Designs in Qualitative Research
Th Feb 13	Class 6	Chapter 11: Withdrawal and Associated Designs
Th Feb 20	Class 7	Chapter 12: Multiple-Baseline Designs
Th Feb 27	Class 8	Chapter 5: Experimental Designs
Th Mar 05	Class 9	Chapter 6: Causal-Comparative Research
Th Mar 12	Class 10	No formal class meeting - individually work on research proposals
Th Mar 19	Class 11	Chapter 7: Correlational Research (excluding pp. 220-231) Chapter 8: Survey Research Methods
Th Mar 26	Class 12	Chapter 14: Program Evaluation
Th Apr 02	Class 13	Chapter 15: Evaluating the Literature
Th Apr 10	Class 14	Chapter 16: Action Research
M Apr 20	Final: Written Research Proposal Submit to Learning Suite by 5:30 pm	No Class
<p>*Please note this is a simplified schedule – for a complete list of all assignment due dates, additional readings, and any changes to this schedule, please refer to the course page on Learning Suite.</p>		