



**College of Education and Human Development
Division of Special Education and disAbility Research**

Spring 2013

EDSE 590 001: Special Education Research

CRN: 10692, 3 - Credit(s)

Instructor: Dr. Carolyn Iguchi	Meeting Dates: 01/22/13 - 05/15/13
Phone:	Meeting Day(s): Mondays
E-Mail: chollan2@gmu.edu	Meeting Times: 7:20PM-10:00PM
Office Hours: Before class and by appointment	Meeting Location: Fairfax, T L014

***Note:** This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.*

Course Description

Describes fundamental concepts and practices in educational research in special education. Covers specific applications of educational research methods to problems in special education. Emphasizes review and critique of special education research, and applied classroom research for teachers.

Prerequisite(s): None

Co-requisite(s): None

Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703)993-3145 for assistance. All other students should refer to their faculty advisor.

Nature of Course Delivery

Learning activities include the following:

1. Class lecture and discussion
2. Application activities

3. Small group activities and assignments
4. Research and presentation activities
5. Electronic supplements and activities via Blackboard

Learner Outcomes

Upon completion of this course, students will be able to:

- Identify and understand different methods of educational research suitable for different research purposes in special education.
- Describe and discuss basic theories and methods of quantitative experimental and quasi-experimental research in special education.
- Describe and discuss basic theories and methods of survey research in special education.
- Describe and discuss basic theories and methods of single subject research in special education.
- Describe and discuss basic theories and methods of qualitative research in special education.
- Critically evaluate education research and describe implications for educational practice.

Required Textbooks

American Psychological Association (2009). *Publication manual of the APA (6th ed.)*. Washington, DC: Author.

McMillan, J.H. (2012). *Educational research: Fundamentals for the consumer (6th ed.)*. Boston: Pearson Education.

Recommended Textbooks

None

Required Resources

Blackboard

Additional Readings

As assigned by the instructor.

Course Relationship to Program Goals and Professional Organizations

This course is part of the George Mason University, Graduate School of Education (GSE), Masters in Special Education Program. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization. The CEC Standards are listed on the following website: <http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards>

rds/. The CEC standards that will be addressed in this class include Standard 4: Instructional Strategies and Standard 9: Professional and Ethical Practice.

GMU POLICIES AND RESOURCES FOR STUDENTS:

- a.* Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- b.* Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- c.* Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- d.* The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
- e.* Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- f.* Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g.* The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].

PROFESSIONAL DISPOSITIONS

Students are expected to exhibit professional behaviors and dispositions at all times.

CORE VALUES COMMITMENT

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See <http://cehd.gmu.edu/values/>]

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>].

Course Policies & Expectations

Attendance.

Students are expected to attend all class meetings prepared to participate in class discussion and activities.

Late Work.

Assignments are due by the start of class on the assigned due date. There is a 10% per day grade penalty for work submitted late. Final papers will not be accepted late under any circumstances.

Grading Scale

95-100% = A

90-94% = A-

80-89% = B

70-79% = C

<70% = F

1. Article Analysis Papers (30%, 15% each)
2. Final Exam (25%)
3. Final research paper (40%)
4. Research presentation (5%)

Assignments

NCATE/TaskStream Assignments.

Final Research Paper*

For the final signature assignment, students will develop a research question relevant to the field of special education and write a research proposal that will describe how to carry out a study to answer their question. *Actual data collection and analysis is not required for this assignment.* The research proposal paper will follow the appropriate experimental methodology for the research question. The paper will be formatted according to the APA manual guidelines and include the following sections: literature review, methods, and validity and limitations. Papers will be approximately 10 to 15 pages in length.

Students have the option to work with a partner on this assignment. Students will prepare the paper and present their final paper presentation jointly and will receive the same grade.

Literature Review

The purpose of the literature review is to introduce the reader to the research question, strategically explore previous research in this area, and argue for the rational of the present study. Students should cite at least five articles published in peer reviewed journals in the literature review. The literature review

should include the following components: a broad introduction to the research problem, a focused assessment and integration of previous research to provide justification for the present study, a statement of the research questions, and research hypotheses. Students will be evaluated on clarity of written expression, strong justification of the significance of the research problem, thorough assessment of published research with strong integration of the research to establish a foundation for the proposed study, and strength of research questions according to the criteria established by McMillan. A thorough literature review is typically 4-6 pages in length.

Methods

The methods sections will contain the following subsections: participants, measures, and procedure.

The participants section should include (a) a description of the population being examined, (b) a plan for selecting the sample from the population, (c) a rationale or justification of why the sampling method was selected, and (d) a hypothetical description of the participants selected. The description of the participants should include demographic data relevant to the proposed study.

The measures section will describe the key variables examined in your research and the materials or measures used to collect data on these variables. The description of the variables will contain both conceptual and operational definitions and specify both dependent and independent variables. In the description of the materials, APA formatted citations must be included for published measures.

The procedure section starts with a description of the specific type of research methodology and a justification for this research methodology based on your research question. The procedure section will thoroughly describe **each step** in the execution of the research. Summarize or paraphrase instructions (if applicable). The description of the procedure should be sufficient to allow for **exact replication** of the study. It may be necessary to include study materials as appendices. The procedure for conducting the study should follow the type of research methodology selected. Students will not be required to collect actual data, but a plan for conducting analysis of the data should be included. Students will be evaluated on the strength of the experimental design.

Validity, Limitations, and Anticipated Results

In this section, students must address potential threats to internal and external validity as described in McMillan. Students will describe how they will address these threats. The discussion of validity should be specific to the type of research methodology selected. The student must also address the limitations of the current study and provide recommendations for future research that would address these limitations. The paper will conclude with a statement of the predicted results.

Scoring Rubric

A detailed scoring rubric will be provided by the instructor. Work will be evaluated on content, writing style and clarity, and adherence to APA formatting standards.

Research Presentations

Students will prepare a brief PowerPoint presentation to share their research proposal with their peers. A successful presentation will contain the following: (a) key findings from previous research as outlined in

the literature review, (b) the research question(s), (c) a brief description of the participants, (d) a brief description of the study procedure, and (e) predicted findings. Presentations should be well organized and visually appealing. Presentations should be no longer than 10 minutes per student.

Common Assignments.

Article Analyses Papers

Each student is required to submit two article analysis papers during the course of the semester based on a published academic research article that utilized the methodologies we will be studying. The purpose of this assignment is for students to learn to assess the quality of published educational research and to distill the most pertinent information.

Students will select a research article published in the last 5 years from a peer-reviewed academic journal. Students may use articles that will be included in the literature review for their final research paper. The article selected must use the appropriate type of research methodology. Article analysis papers based on the incorrect methodology will not be accepted for credit.

The paper will start with a brief summary of the research problem, participants, experimental methodology, and findings (approximately 2 pages). This summary will be followed by an assessment/critique of the article (approximately 1 page). One of the key aspects of this assignment is to teach students to communicate the most important information from the study; therefore, there is a **strict three page limit** for the paper.

The focus of the critique will depend on the specific article. Students should refer to McMillan's guidelines for assessing published research. For example, the critique may examine several of the following elements:

- (1) The fit between the research problem and the research methodology or design
- (2) Appropriate or inappropriate use of data collection instruments
- (3) The author's attention to rigorous data collection procedures and data analysis
- (4) Apparent flaws in execution of the research
- (5) Quality of sampling procedure, description of participants or inclusion criteria for participants

Papers will be evaluated on selection of an appropriate research article, clarity of written expression, demonstration of understanding of the research methodology and execution, thorough assessment of the strengths and weaknesses of the article, and correct usage of APA formatting.

Paper Format:

-APA formatted cover sheet

-Article assessment (3 pages)

-APA formatted reference page

Other Assignments.

Final Exam. Students will take a final exam on May 6, 2013. The exam will cover reading material and class lecture.

Schedule

A detailed course schedule will also be posted on the Blackboard site for the course. The schedule may change at any time to reflect the needs of the class. The Blackboard schedule represents the most current schedule.

- I. January 28
 - a. Topics
 - i. Introduction to Research in Education
 - b. Reading: N/A
 - c. Assignments due: N/A
- II. February 4
 - a. Topics
 - i. Research Problems, Variables, and Hypotheses
 - b. Reading
 - i. McMillan Chapter 1
 - ii. McMillan Chapter 2
 - c. Assignments due
 - i. Make sure your GMU email account is active and checked regularly or forwarded to another email account. The email ID and password are necessary for using library resources and for class communication.
- III. February 11
 - a. Topics
 - i. Special presentation: Using library resources to identify relevant literature. Guest speaker: Anne Driscoll
 - ii. The Literature Review
 - b. Reading
 - i. McMillan Chapter 3
 - c. Assignments due
 - i. Develop two researchable questions as potential topics for the final paper. Bring your questions to class for peer feedback.
- IV. February 18
 - a. Topics
 - i. Participants, Subjects and Sampling
 - b. Reading
 - i. McMillan Chapter 4
 - c. Assignments Due
 - i. Get approval from the instructor for your final research question
 - ii. Schedule two hours to devote to searching for relevant literature on your final paper topic. Bring to class the citations and abstracts for the articles you identified. The emphasis at this point is quantity over quality – you can weed out studies that will not work for your literature review later.
- V. February 25
 - a. Topics
 - i. Educational Measurement
 - b. Reading
 - i. McMillan Chapter 5

- c. Assignments Due
 - i. Bring to class the participants section of your final paper in draft form.
- VI. March 4
 - a. Topics
 - i. Data Collection Techniques
 - b. Reading
 - i. McMillan Chapter 6
- VII. March 11: NO CLASS MEETING, GEORGE MASON SPRING BREAK
- VIII. March 18
 - a. Topics
 - i. Nonexperimental Quantitative Research Designs
 - b. Reading
 - i. McMillan Chapter 7
 - c. Assignments Due
 - i. Bring to class the measures section of your final paper in draft form.
- IX. March 25
 - a. Topics
 - i. Experimental Research Designs
 - b. Reading
 - i. McMillan Chapter 8
- X. April 1
 - a. Topics
 - i. Qualitative Research Designs
 - b. Reading
 - i. McMillan Chapter 10
 - c. Assignments Due
 - i. True-Experimental Article Analysis Paper
- XI. April 8
 - a. Topics
 - i. Mix-Method and Action Research
 - b. Reading
 - i. McMillan Chapters 11 and 12
- XII. April 15
 - a. Topics
 - i. Discussion and Conclusions
 - b. Reading
 - i. McMillan Chapter 13
 - c. Assignments Due
 - i. Qualitative Research Article Analysis Paper
 - ii. Bring to class the procedures section of your final paper in draft form
- XIII. April 22
 - a. Topics
 - i. APA Style/Formatting Workshop
 - ii. Review of validity and limitations for the final paper
 - b. Reading
 - i. Familiarize yourself with the structure of the APA manual
 - ii. APA Manual: Read all of chapters 2 and 3 and section 6.01 on plagiarism
- XIV. April 29 NO CLASS MEETING, INDEPENDENT STUDY NIGHT
- XV. May 6
 - a. Topics
 - i. Final exam

- b. Assignments Due
 - i. Group A Presentations
- XVI. May 13
 - a. Assignments Due
 - i. Group B Presentations
 - ii. Final Papers due electronically by midnight

