



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

Spring 2014

EDSE 590 678: Special Education Research

CRN: 17959, 3 - Credits

Instructor: Dr. Jennifer Walker	Meeting Dates: 01/21/14 - 05/14/14
Phone: 703-850-7517	Meeting Day(s): Monday
E-Mail: jwalkerr@gmu.edu	Meeting Time(s): 4:30 pm-7:10 pm
Office Hours: By appointment	Meeting Location: ARL FH 478

***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-requisites: 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) 993-3670 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. Video and other media supports
5. Research and presentation activities
6. 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

McMillan, J.H. (2012). *Educational research: Fundamentals for the consumer (6th ed.)*. Boston: Pearson Education. ISBN-10: 0132596474; ISBN-13: 9780132596473

Digital Library Option

The Pearson textbook(s) for this course **may be** available as part of the **George Mason University Division of Special Education and disAbility Research Digital Library**. Please note that not all textbooks are available through this option. Visit the links below before purchasing the digital library to ensure that your course(s) text(s) are available in this format. The division and Pearson have partnered to bring you the Digital Library; a convenient, digital solution that can save you money on your course materials. The Digital Library offers you access to a complete digital library of **all Pearson textbooks** and MyEducationLabs used across the Division of Special Education and disAbility Research curriculum at a low 1-year or 3-year subscription price. Access codes are available in the school bookstore. Please visit <http://gmu.bncollege.com> and search the ISBN. To register your access code or purchase the Digital Library, visit:

<http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html>

- 1 year subscription \$200 ISBN-13: 9781269541411
- 3 years subscription \$525 ISBN-13: 9781269541381

- Individual e-book(s) also available at the bookstore link above or at <http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html>

Required Resources

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

Additional Readings

All required additional readings are posted on Blackboard.

Course Relationships 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 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://oai.gmu.edu/honor-code/>].
- b. Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>].
- 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 class and actively participate in all assignments, group activities, class discussions, and online activities. Active participation includes the asking of questions and the presentation of one's own understanding with regard to the readings and lectures as well as interactive discussion and participation in activities with other class members. Active participation also includes listening and respectful consideration of the comments of others. This will require all students to complete the required readings, activities, and assignments for that specific class meeting in advance.

Students are required to complete all in-class and out of class assignments to earn class participation grade for each class session. As part of your participation grade, you will be required to post to the discussion board in blackboard on several occasions throughout the course. *Specific guidance for the content of these posts will be provided by the instructor.* Be aware that any points earned for participation in class activities (including Blackboard posts) during a time of absence will not be earned and cannot be made up.

Students should email the professor before or on the day of class meeting if you will not be able to attend.

If a student is absent, it is the *student's* responsibility to acquire notes, work, handouts, etc. It is recommended that students pair with another classmate as a class partner.

Late Work.

All graded assignments are outlined in the syllabus and are due on the date indicated. If the due date is changed for any reason, the change will be discussed in class, posted on the Blackboard site, and confirmed in an email to all students.

If you are not in class on the day an assignment is due, you are still responsible for submitting the assignment on time.

Assignments must be submitted via Blackboard by 7:10 on the date it is due or it will be considered a day late. No exceptions.

If your assignment will be late, notify me immediately and give me an estimated date of completion. There will be a 2 point per calendar day penalty for turning in assignments after the due date. Except in very unusual circumstances (e.g., hospitalization, accident), **and** with prior approval from the professor, **no assignment more than 5 calendar days late will be accepted.**

You will not be reminded of overdue assignments.

APA Formatting.

APA style is the standard format for any written work in the College of Education. If you are unfamiliar with APA, it would benefit you to purchase the *Publication Manual of the American Psychological Association* (6th ed.) or to access one of the internet sites that provides a summary of this information. You are required to use APA guidelines for all course assignments. All work produced outside of class must be typed unless otherwise noted.

Work Submission and Academic Integrity.

All assignments are to be double-spaced, typed, 12 point font, 1" margins, in APA format, and completed on time or subjected to point reduction as outlined above. Work should be submitted through Blackboard and files should be **labeled as follows:**

StudentName_AssignmentName.doc

To maximize credit for assignments, the rubric must be clearly and concisely followed for each assignment. Failure to do so will result in a reduction of points. If at any time you are confused about course material or an assignment, please contact me so we can problem solve together. Credit **MUST** be given to material copied or quoted from sources, i.e., books, internet sites, or curriculum material. Failure to do so may be viewed as plagiarism. Take care to give credit to an author when you borrow either exact words or general ideas. Generally, if you use 4 or more words in a row you should use quotation marks and proper APA citation. Evidence of plagiarism or any other form of cheating will result in a zero on the assignment and a report of the incident to the Dean's office.

TaskStream Submission

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, (**NO ASSESSMENT REQUIRED FOR THIS COURSE**) (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in TaskStream. Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete(IN). Unless the IN grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

If you have never used TaskStream before, you **MUST** use the login and password information that has been created for you. This information is distributed to students through GMU email, so

it is very important that you set up your GMU email. For more TaskStream information, go to <http://cehd.gmu.edu/api/taskstream>

Grading Scale

Evaluation	Points	Points Earned
Class attendance and participation, Blackboard discussions	15 points (1 point each class session, to include any Blackboard discussions for that class session)	/15
CITI Training	10 points	/10
Article analyses papers	20 points (10 points each)	/20
Final research project: Paper	40 points	/40
Final research project: Presentation	5 points	/5
Final Exam	10 points	/10
Total possible points	100	/100

A	94-100%
A-	90-93%
B+	88-89%
B	83-87%
B-	80-82%
C	70-79%
F	69 or less

Assignments

Performance-based Assessment (TaskStream submission required).

None for EDSE 590.

Performance-based Common Assignments (No TaskStream submission required).

Final Research Project: Research Review Paper (40 points) Rubric in Appendix

You will complete a traditional research review paper of a selected intervention area of your choice. **Your topic must be approved by the instructor.** You will need to collect a minimum of 8-10 original intervention research studies on a particular topic to include in your review paper. An electronic copy (posted on Blackboard) should be submitted no later than 7:10 p.m. on the due date.

Effective literature reviews contain the following:

- **Title page**
- **Abstract**
- **An introduction** that establishes an important educational problem that needs to be addressed, a logical presentation of information that leads to the purpose statement of the paper (in this case a systematic literature review). Important concepts are defined in this section as well as any background information needed to support search procedures in the methodology.
- **A method section** that has clearly replicable procedures and demonstrates competency in the search techniques learned in class (search of educational data bases with key terms, ancestry and/or descendent searches, hand searches of relevant journals), and identifies clear and reasonable decision making criteria for individual studies included in the review (inclusion/exclusion criteria).
- **A results section** that provides an overview of the characteristics of the data set, is logically organized for the reader, demonstrates that search procedures described in the method section were consistently followed, and succinctly and sufficiently describes relevant information from each of the studies reviewed. A visual representation of the findings (i.e., a table) with accurate information helps the reader to understand more thoroughly the research reviewed.
- **A discussion section** that provides a thoughtful and analytical discussion of findings and is based firmly on studies reviewed (not solely the authors opinion), and references implications for practice where appropriate.
- **Overall** student understanding of the purpose of each of these sections of a research paper, a professional writing style (has been thoroughly edited), and citations that are in APA format (with careful attention to ‘glaring’ errors).

Final Research Project: Research Review Poster Presentation (5 points) Rubric in Appendix

You will present the finding of your final research project in a poster session format. In addition:

- Be prepared to explain clearly your search procedures and findings, and to answer questions about your project.
- Prepare visual materials for the presentation – refer to the AERA Poster Session Guidelines document provided by the instructor.
- Prepare a one-page summary hand-out for your audience and the instructor.

Other Assignments.

Human Subjects CITI Training Module Completion (10 points)

GMU Mandatory Training for Persons Conducting Research Using Human Subjects (“Group 1 Social & Behavioral Research, Basic Course”) is accessed at <http://www.citiprogram.org>. Seven learner modules in the Basic Course are required prior to conducting any research at Mason using human subjects. In addition, you are required to complete additional modules related to conducting research with school aged children and persons with disabilities. Copy certification of completion document and provide to Dr. Walker in a hard copy. No partial credit will be given. *This assignment will be evaluated as pass/fail or 0 points/10 points.*

Article Analyses (10 points each) Rubric in Appendix

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

Students will select a research article published in the last five years from a peer-reviewed academic journal. Students may use articles that will be included in the literature review for their final paper. The first article will be based on a paper utilizing true experimental design methodology. The second article analysis will be based on a qualitative methodology. Article analysis papers based on the incorrect methodology will not be accepted for credit. Students are encouraged to seek approval from the instructor for their chosen articles. A copy of the original article is necessary so the instructor will be able to review the article as necessary to evaluate the critique.

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 paper will include a summary of the research problem, participants, experimental methodology, and findings (approximately two pages). This summary will be followed by a critique of the researcher(s) execution of the experimental methodology (approximately one page). The specific focus of the critique will depend on the selected 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 the execution of the research
- (5) Quality of sampling procedure, description of participants or inclusion criteria for participants

Papers will be evaluated on selection of appropriate research article, a copy of the original 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
- Copy of original article (PDF file). A link to the article will not be sufficient.

Final Exam (10 points)

There will be a final exam for the course covering the lectures and readings throughout the course. The format of the exam will include multiple-choice and application items.

Schedule

CLASS TOPICS & DUE DATES

Date	Class Topic & Reading Assignments	Readings/ Assignments Due Dates
1 1/27	<ul style="list-style-type: none"> • Start of Class Logistics • Course Overview • Special Education Research: An Introduction to Types of Research • APA Writing Style • Components of Research Reports or Articles • Ethical Standards for Conducting Research • Writing Activity: The Anatomy of a Research Article 	<ul style="list-style-type: none"> * McMillan Chapter 1 & 2 * APA Ch. 2; skim Ch. 1, 3, & 6 * “Teachers as Researchers” article, Babkie & Provost * Make sure you can access Blackboard and your email
2 2/3	<ul style="list-style-type: none"> • ONLINE CLASS: CITI Training 	<ul style="list-style-type: none"> * Final Research Paper Topic Emailed and Approved by February 10th
3 2/10	<ul style="list-style-type: none"> • Hypotheses- Generating and Writing • Purpose and Steps for Conducting a Literature Review • Primary and Secondary Sources • Writing a Review of the Literature • Characteristics of Quality Research • APA Editing Activity 	<ul style="list-style-type: none"> * CITI Training Certificate Due * Final Research Paper Topic Emailed and Approved by February 10th * McMillan Chapter 3 * Print out or be able to access copies of “Research in Special Education...” Odom, et al. and “Peer Assisted Learning Strategies” Saenz, Fuchs, & Fuchs
4 2/17	<ul style="list-style-type: none"> • Locating Literature • Educational Searches via the Internet • Identifying Research Sources • Ancestry Searches 	<ul style="list-style-type: none"> * <i>Literature Review Introduction & Method Section Draft Due</i>
5 2/24	<ul style="list-style-type: none"> • Participants, Subjects, & Sampling • Probability and Non-probability Sampling • Descriptive Statistics: Definition and Essential Terms 	<ul style="list-style-type: none"> * McMillan Chapter 4 * Read “Research in Special Education: Scientific Methods and Evidence-Based Practices” (Winter ’05 EC articles, Odom et al.)

6 3/3	<ul style="list-style-type: none"> • Validity and Reliability • Measurement, Evaluation, and Assessment • Educational Measures • Questionnaires, Observations, & Surveys 	<p>* Literature Review References (8-10 intervention studies) Draft Due</p> <p>* McMillan Chapters 5 & 6</p>
3/10	Spring Break	Spring Break
7 3/17	<ul style="list-style-type: none"> • Experimental Research Designs • Descriptive, Comparative, Correlational, & Causal-Comparative Studies • Validity: Internal and External • Types of Experimental Designs 	<p>*Literature Review Results (1 paragraph summary of 1 study) Draft Due</p> <p>* McMillan Chapters 7 & 8 (except 238-242)</p> <p>* Read “Evaluating the Quality of Evidence from Correlational Research for Evidence-Based Practice” (Winter ’05 EC article, Thompson, et al.)</p>
8 3/24	<ul style="list-style-type: none"> • National Data Resources • Introduction to Statistical Analysis • Making Statistical Inferences • Interpreting the Findings • Statistical Analysis Software 	<p>* McMillan Ch. 9</p> <p>* Literature Review Table Draft Due</p>
9 3/31	<ul style="list-style-type: none"> • Inferential Statistics • Null Hypothesis • Type 1 & Type 2 Errors • Statistical Significance 	<p>* Read Quality Indicators for Group Experimental and Quasi-Experimental Research in Special Education” (Winter ’05 EC articles, Gersten et al.)</p>
10 4/7	<ul style="list-style-type: none"> • Single Subject Research Designs 	<p>* Article Analysis #1 Due</p> <p>* Read “The Use of Single-Subject Research to Identify Evidence-Based Practice in Special Education” (Winter ’05 EC articles, Horner, et al.)</p> <p>* McMillan pp. 238-242</p>
11 4/14	<ul style="list-style-type: none"> • Using individual student data 	<p>* Literature Review Overview of Results Draft Due</p> <p>* Prior to class: Complete the module on data based decision making at http://mast.ecu.edu/modules/dbd/ (start at Introduction)</p>
12 4/21	<ul style="list-style-type: none"> • Qualitative Research • Mixed Methods Design • Action Research 	<p>* Results and Discussion Draft Due</p> <p>* Read “Qualitative Studies in Special Education” (Winter ’05 EC articles, Brantlinger et al.)</p> <p>* McMillan Chapters 10, 11, & 12</p>
13 4/28	<ul style="list-style-type: none"> • Discussion Section of Research Report: Interpretations, Conclusions, Recommendations, and Limitations • Connecting the Results Back to the 	<p>*Article Analysis #2 Due</p> <p>* Entire Final Paper Draft Due</p> <p>* McMillan Chapter 13</p> <p>* Read “Tips for Readers of Research-</p>

	Hypothesis	‘Seeing Through’ the Graphs” and “Trouble with Research” Bracey
5/5	<ul style="list-style-type: none"> • Catch Up on Previous Topics • Final Paper Poster Presentations • Final Exam Review • End of Course Logistics 	<ul style="list-style-type: none"> * Final Paper Due * Final Paper Poster Presentations Due
5/12	<ul style="list-style-type: none"> • Final Exam 	* Final Exam Due by 7:20 p.m.

NOTE: This syllabus may change according to class needs. Students will be notified by email and on Blackboard. Please check both regularly.

Appendix

Final Research Project: Research Review Paper Rubric

Title Page: Proper APA formatting	1 pt.
Abstract: Proper APA formatting, concise, comprehensive	2 pts.
Introduction: An important educational problem that needs to be addressed is identified and discussed. A logical presentation of information leads to the purpose statement of the paper. Important concepts are defined. Any background information needed to support search procedures in the methodology are outlined.	4 pts.
Method: Clearly replicable procedures are outlined. Competency in search techniques is clearly evident and explained. Clear and reasonable decision-making criteria for individual studies inclusion and exclusion are outlined.	4 pts.
Results: A comprehensive overview of the characteristics of the data set is logically organized for the reader. The search procedures described in the method section were consistently followed. Relevant information from each of the studies reviewed is succinctly and sufficiently described. A visual representation of the findings with accurate information that enhances understanding for the reader is included.	10 pts.
Discussion: A thoughtful and analytical discussion of the findings is based firmly on the studies reviewed. Information is presented in a factual manner, devoid of personal opinions. Implications for practice are referenced appropriately. Information is cited throughout.	15 pts.
Overall: Demonstration of the purpose of each section of the research paper. A thoroughly edited professional writing style is evident. Paper is in proper APA, to include headings, running head, page numbers, and citations.	3 pts.
References: All references and citations are present. All references in APA style.	1 pt.
Total	40 pts.

Final Research Project: Research Review Poster Rubric

Poster: Poster clearly describes major elements of the project. Poster reflects clarity, organization, and knowledge. Reflects a high level of preparation. Makes an effective use of visual format and presents an interesting, attractive appearance.	2 pts.
Presentation: Presenter describes very clearly the methods under consideration. Presenter keeps the audience engaged. Provides information of interest and of value to the audience. Presenter is able to answer basic audience questions about the proposal with poise, clarity, and thoughtfulness.	2 pts.
Page Summary: Page summary describes major elements of the project. Reflects a high level of preparation. Presents an interesting, attractive appearance.	1 pt.
Total	5 pts.

Article Analysis Rubric

Pass/ Fail: Paper adheres to correct methodology (qualitative or quantitative). Article analysis papers based on the incorrect methodology will not be accepted for credit. Students are encouraged to seek approval from the instructor for chosen articles.	0 pts./ not accepted for credit
Summary: Includes concise yet comprehensive summary of research problem, participants, experimental methodology, and findings.	4 pts.
Critique: The execution of several elements of the methodology is critiqued in a thoughtful and well developed manner. An understanding of the methodology is clearly evident.	3 pts.
Overall: Demonstration of an understanding of the research methodology and execution. Paper is in proper APA, to include headings, running head, page numbers, and citations. A thoroughly edited professional writing style is evident.	1.5 pts.
Paper Guidelines: Adheres to format, including three page limit, cover sheet, and references. A copy of the original article, no more than five years old, from a peer-reviewed journal is attached.	1.5 pts.
Total	10 pts.