



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

Spring 2013

EDSE 590 669: Special Education Research

CRN: 20352, 3 - Credit(s)

|  |   |
|--|---|
| <b>Instructor:</b> Dr. Kelly Henderson                   | <b>Meeting Dates:</b> 01/10/13 - 03/14/13               |
| <b>Phone:</b> (703)282-3408                              | <b>Meeting Day(s):</b> Thursdays                        |
| <b>E-Mail:</b> khender8@gmu.edu                          | <b>Meeting Times:</b> 4:30PM-8:30PM                     |
| <b>Office Hours:</b> before, after class, by appointment | <b>Meeting Location:</b> Off-campus/Other, Chantilly HS |

**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**

*[Instructors, please revise in accordance with your specific course format]*

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 MyMason Organization

### **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 (6<sup>th</sup> ed.)*. Washington, DC: Author. ISBN: 1-4338-0562-6; ISBN 13: 978-1-4338-0562-2

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

It is highly recommended that students bring the McMillan textbook to class each week as the instructor may make specific reference to it during class.

Other reading relevant to special education research applications will be assigned by the instructor as appropriate.

### **Required Resources**

This course uses a Blackboard-like **Organization** at MyMason online. This provides access to most of the assigned readings and other links of interest. Click on the Organizations tab at <https://mymasonportal.gmu.edu/webapps/portal/frameset.jsp> . You must be enrolled in the Organization to have access. Email Dr. Henderson immediately if you cannot access it.

### **Additional Readings**

As assigned, see Schedule.

## **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/>. 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 class and actively participate in all assignments, group activities, and class discussions. 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. This will require all students to complete the required readings, activities, and assignments for that specific class meeting.

While we all have busy lives as well as professional and personal commitments outside this course, you have made a commitment to be present for this course and to complete the requirements therein. If an extenuating circumstance was to occur and prevent you from attending class, please arrange to obtain notes and handouts from another student. Notify that person in sufficient time for them to be of assistance for you.

### **Late Work.**

Points will be deducted for assignments not submitted on time (the beginning of the class meeting time). Generally, points equal to half of a letter grade are deducted for each class session past due.

## **Grading Scale**

|    |   |                |
|----|---|----------------|
| A  | = | 95-100 points  |
| A- | = | 90 - 94 points |
| B  | = | 80 - 89 points |
| C  | = | 70 – 79 points |
| F  | = | < 70 points    |

## **Assignments**

### **NCATE/TaskStream Assignments.**

None for EDSE 590.

### **Common Assignments.**

**In-class Pop Quizzes:** To reinforce the textbook content and encourage thorough reading, Dr. Henderson will give unannounced pop quizzes that include questions similar or identical to the

online practice tests. These pop quizzes will be given via the classroom's lab computers or in paper. At least three will be given throughout the semester and will be averaged and collectively contribute 10 points of your semester grade. There are no make-ups for these quizzes.

**Critique of Research Article:** There is one research article critique required. The article will be individually selected by each student and may be related to the research topic selected for the research application paper. When submitting a hard copy of the critique you have selected, the original article must be included. The copy of the original article is necessary so the instructor will be able to review the article as necessary to evaluate the critique. Grading Rubric is available on Bb; *attach a blank, ungraded rubric* to your assignments.

**CITI Module Completion:** The CITI Module involves the completion of GMU **Mandatory** Training for Persons Conducting Research Using Human Subjects (“Group 1 Social & Behavioral Research, Basic Course”) that 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, if the information in any of the optional modules relates to your research, you can complete the appropriate module for up to 3 extra credit points. These optional modules can only be opened after you finish the Basic Course. Copy certification of completion document and provide to Dr. Henderson in hard copy. No partial credit will be given on this assignment.

**Quantitative Analysis:** To increase familiarity with existing national and state data sources, students will identify and examine currently available data from one published national or state data source. In addition to examining and describing the data, students will write a “conclusions” section identifying and commenting on the major findings, with respect to their utility to school and classroom settings. A grading rubric is available on Bb; *attach an ungraded rubric* to your assignment.

**Research Application:** Students will employ appropriate research methodology to investigate a problem of interest in a classroom, using group-experimental or quasi-experimental, single-subject, survey, or qualitative methodology. Students will prepare a research report on this project using the format recommended by the Publication Manual of the American Psychological Association (6<sup>th</sup> ed.). This includes Title page; Abstract; Introduction and purpose; Method (participants, materials, procedures); Findings or Results; Discussion; References. A grading rubric is on Bb; *attach an ungraded rubric* to your assignment.

**Research Presentation:** Students will present the results of their research project to the class in a formal research presentation format. The presentation should not exceed 8 minutes, most of which should be spent on your method and findings. The use of audiovisual, posters, handouts, or other presentation materials is encouraged. Grading rubric is on Bb; *attach an ungraded rubric* to your assignment.

**Other Assignments.**

Additional assignments related to the application of the concepts of the course may be given in class as appropriate.

**Individual Student Grade Sheet**

|              | <i>Attendance participation</i> | <i>Critique</i> | <i>CITI module</i> | <i>Quant. Analysis</i> | <i>Pop Quizzes</i> | <i>Research Project</i> | <i>Research Presentation</i> | Total |
|--------------|---------------------------------|-----------------|--------------------|------------------------|--------------------|-------------------------|------------------------------|-------|
| Earn         |                                 |                 |                    |                        |                    |                         |                              |       |
| Points Poss. | 10                              | 10              | 10                 | 15                     | 10                 | 35                      | 10                           | 100   |

**Schedule**

Tentative class schedule, subject to change:

| <b>Class</b> | <b>Date</b> | <b>Big Topics</b>   | <b>Readings/Assignments Due</b>   |
|--------------|-------------|---|---|
| <b>1</b>     | 1/10        | <ul style="list-style-type: none"> <li>• Introductions</li> <li>• Start of Class Logistics</li> <li>• Introduction to Research in Education</li> <li>• Research Problems</li> <li>• Variables, Hypotheses, &amp; Research Questions Introduction</li> <li>• Components of Research Report or Article</li> <li>• APA Writing Style</li> <li>• Research Problems in Special Education</li> <li>• Ethical Standards for Conducting Research</li> <li>• Implementing Research in Your Classroom</li> <li>• Quantitative and Qualitative Research Characteristics</li> </ul> | <ul style="list-style-type: none"> <li>• McMillan – Chap. 1 &amp; 2</li> <li>• APA – Ch. 2; skim Ch. 1, 3 &amp; 6</li> <li>• “Teachers as Researchers” article, Babkie &amp; Provost</li> <li>• Activate GMU email account and check that you can access Blackboard via MyMason <b>Organization.</b> Email me by 8 am Monday 1/14 if you cannot.</li> </ul> |
| <b>2</b>     | 1/17        | <ul style="list-style-type: none"> <li>• Hypotheses – Generating and Writing</li> <li>• Begin Purpose and Steps for</li> </ul>  | <ul style="list-style-type: none"> <li>• McMillan – Chap. 3 &amp; 4</li> <li>• Print out or be able to access electronic copies of “Research in</li> </ul>  |

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|   |      | <p>Conducting a Literature Review</p> <ul style="list-style-type: none"> <li>• Finish Purpose and Steps for Conducting a Literature Review</li> <li>• Primary and Secondary Sources</li> <li>• Writing a Review of the Literature</li> <li>• Characteristics of Quality Research Article Critiques</li> <li>• Subjects, Participants, and Sampling</li> <li>• Probability and Non-probability Sampling</li> </ul>  | <p>Special Education...” by Odom et al. and “Peer Assisted Learning strategies” by Saenz, Fuchs &amp; Fuchs</p> <ul style="list-style-type: none"> <li>• <b>APA Editing Activity, in class</b></li> </ul>  |
| 3 | 1/24 | <ul style="list-style-type: none"> <li>• Descriptive Statistics: Definition and Essential Terms</li> <li>• Validity and Reliability</li> <li>• Measurement, Evaluation, and Assessment</li> <li>• Educational Measures</li> <li>• Questionnaires, Observations, &amp; Surveys</li> </ul>   | <ul style="list-style-type: none"> <li>• McMillan – Chap. 5 &amp; 6</li> <li>• Read “Research in Special Education: Scientific Methods and Evidence-Based Practices” (Winter 05 EC articles, Odom et al.)</li> </ul>   |
| 4 | 1/31 | <ul style="list-style-type: none"> <li>• Locating Literature</li> <li>• Educational Searches via the Internet</li> <li>• Identifying research sources</li> </ul>   | <ul style="list-style-type: none"> <li>• Meet at Fenwick library on GMU campus (room A214), presentation by Anne Driscoll, Education Liaison Librarian. Directions- <a href="http://library.gmu.edu">http://library.gmu.edu</a> . If possible, bring laptops.</li> </ul>   |
| 5 | 2/7  | <ul style="list-style-type: none"> <li>• Experimental and Non-Experimental Quantitative Research Designs</li> <li>• Descriptive, Comparative, &amp; Correlational, &amp; Causal-Comparative Studies</li> <li>• Validity: Internal &amp; External</li> <li>• Types of Experimental Designs</li> <li>• National data resources</li> <li>• Introduction to statistical analyses</li> <li>• Making Statistical Inferences</li> <li>• Interpreting the Findings</li> <li>• Statistical Analysis software</li> </ul> | <ul style="list-style-type: none"> <li>• McMillan – Chap. 7, 8 (except pp.238-242) &amp; 9</li> <li>• Read “<a href="#">Quality Indicators for Group Experimental and Quasi-Experimental Research in Special Education</a>” (Winter 05 EC articles, Gersten et al.)</li> <li>• Read “Evaluating the Quality of Evidence from Correlational Research for Evidence-Based Practice” (Winter 05 EC article, Thompson et al.)</li> <li>• <b>Research Article Critique due (or before!)</b></li> </ul> |

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| 6  | 2/14 | <ul style="list-style-type: none"> <li>• Single Subject Research Designs</li> <li>• Inferential Statistics</li> <li>• Null Hypotheses</li> <li>• Type 1 &amp; Type 2 Errors</li> <li>• Statistical Significance</li> </ul> | <ul style="list-style-type: none"> <li>• Read “The Use of Single-Subject Research to Identify Evidence-Based Practice in Special Education” (Winter 05 EC articles, Horner, et al.)</li> <li>• McMillan – pp. 238-242</li> </ul>                     |
| 7  | 2/21 | <ul style="list-style-type: none"> <li>• Qualitative Research</li> <li>• Mixed Methods Design</li> <li>• Action Research</li> </ul>  | <ul style="list-style-type: none"> <li>• Read “<a href="#">Qualitative Studies in Special Education</a>” (Winter 05 EC articles, Brantlinger et al.)</li> <li>• McMillan – Chap. 10, 11, 12</li> <li>• <b>Quantitative Analysis due</b></li> </ul>   |
| 8  | 2/28 | <ul style="list-style-type: none"> <li>• Discussion Section of a Research Report: Interpretations, Conclusions, Recommendations, and Limitations</li> <li>• Connecting the Results Back to the Hypothesis</li> </ul>       | <ul style="list-style-type: none"> <li>• McMillan- Chap. 13</li> <li>• Read “Tips for Readers of Research-‘Seeing Through’ the Graphs” and “Trouble with Research”, Bracey</li> <li>• <b>CITI Basic Course completion certificate due</b></li> </ul> |
| 9  | 3/7  | <ul style="list-style-type: none"> <li>• Catch up on previous topics</li> <li>• Individual consultation on final projects/presentations</li> </ul>   |  |
| 10 | 3/14 | <ul style="list-style-type: none"> <li>• Research Project Presentations</li> <li>• End of Course Logistics</li> </ul>  | <ul style="list-style-type: none"> <li>• <b>Research Projects Due</b></li> </ul>   |



