



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

Spring 2015

EDSE 590 683: Special Education Research

CRN: 18103, 3 - Credits

<b>Instructor:</b> Dr. Nancy Cerar	<b>Meeting Dates:</b> 1/14/2015 - 3/11/2015
<b>Phone:</b> 703-785-4089	<b>Meeting Day(s):</b> Wednesdays
<b>E-Mail:</b> nirby@gmu.edu	<b>Meeting Time(s):</b> 4:30 pm-9:00 pm
<b>Office Hours:</b> by appointment	<b>Meeting Location:</b> Off-campus;

***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. Hours of Lecture or Seminar per week: 3Hours of Lab or Studio per week: 0

**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) 993-3670 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 (6<sup>th</sup> ed.)*. Boston: Pearson Education. ISBN-10: 0132596474; ISBN-13: 9780132566473

### **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>

### **Recommended Textbooks**

American Psychological Association (2009). *Publication manual of the APA (6<sup>th</sup> ed.)*.  
Washington, DC: Author. ISBN-10: 1-4338-0562-6; ISBN -13: 978-1-4338-0562-2

### **Additional Readings**

Other readings, including special education research studies, will be assigned by the instructor and 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/the-mason-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 expect to (a) attend all classes during the course, (b) arrive on time, (c) stay for the duration of the class time, and (d) complete all assignments. Attendance, timeliness, and professionally relevant, active participation are expected. Attendance and professional participation at all sessions is very important because all of the activities in class are planned in such a way that they cannot necessarily be recreated outside of the class session. Please notify me in advance, if you will not be able to attend class.

### 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.

## **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**

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

### **Assignments**

#### **Performance-based Assessment (TaskStream submission required).**

None for EDSE 590.

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

**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 any of the optional modules relates to your research, you can complete the appropriate module(s), 1 point each up to 3 extra credit points. These optional modules can only be opened after you finish the Basic Course. A copy of the certification of completion document must be uploaded to Blackboard under the appropriate assignment by the beginning of class that the certificate is due. No partial credit will be given on this assignment.

**Qualitative and Quantitative Article Review Projects:** To demonstrate beginning competency in the skills needed for special education research and analysis, students will be asked to find, review, and critique one quantitative research article and one qualitative research article, both from peer-reviewed special education journals. It is imperative that students become familiar with using professional journals in the field of special education to inform their professional practice and be proficient in understanding articles that use both quantitative and qualitative research methods. For the reviews, each student is asked to independently read one research article that implements quantitative data collection methods and analysis (these are articles collecting numerical data and using statistical analysis) and one that utilizes qualitative research methods (discussion, narrative, etc.); and then review the chosen article’s quality indicators according to the corresponding article (qualitative is Brantlinger, et al. (2005); or quantitative is Gersten, et al. (2005)) along with an overall critique of the article. The student will decide which

type of article will be reviewed/critiqued first whether quantitative or qualitative. Whatever is chosen for the first review/critique, the other article type will be chosen for the second review/critique project.

## **Research Application Project**

**Option 1**(*you may work a partner on the final project*): 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 will be made available.

- Title page
- Abstract
- Introduction
  - o Quantitative: specific research questions need to be stated
  - o Qualitative: general problem statement needs to be presented and clarified
- Review of the literature
  - o Quantitative: review of the previous research studies that have been done in this area
  - o Qualitative: brief review of the previous research studies that have been completed
- Research problem statement or questions
  - o Quantitative: specific, narrow question should be presented along with a hypotheses
  - o Qualitative: general, foreshadowed questions should be introduced
- Method and design
  - o Quantitative: research design, participants, instruments, and procedures
  - o Qualitative: research design, participants, and setting/sites
- Results
  - o Quantitative: statistical explanations provided
  - o Qualitative: narrative descriptions explained
- Discussion
- Conclusions
- References

**Option 2:** The research review is geared at having students get extensive experience in reviewing literature found in both the virtual and physical library facilities. For this type of paper, a student(s) can select a specific topic or intervention to investigate via the available research base.

Ten original research studies on the specific topic of selection will be needed for this option and should come from peer-reviewed special education research journals. For larger groups, five studies should be added for each additional group member. Be sure to have your research topic approved by the instructor PRIOR to beginning your journal search. The project should be completed in sections by the students throughout the course of the semester. Time will be provided weekly for students to share and get feedback in their groups. The final research review paper should be submitted via the Assignment Tab in Blackboard and should include the following:

- Title page
- Abstract
- Introduction
  - o General Topic: presented as an area that has needed understanding, exploration, and research
    - Trends: if any trends have been found on the topic during the research, they should be briefly outlined here
    - Thesis: statement of perspective and reason for writing the review
    - Review criteria: elements used in evaluative relevant literature and specified
- Literature Reviewed: this section should be organized by the different studies reviewed
  - o First study- summary and discussion
  - o Second study- summary and discussion
  - o Third study- summary and discussion, etc. until all studies covered
- Comparative analysis highlights the similarities and differences between studies summarized in the literature reviewed
  - o Similarities (if any) between all studies presented, discussed, and evaluated
  - o Differences (if any) between all studies presented, discussed, and evaluated
- Conclusion/Summary brings closure to the review
  - o Key points throughout the review are summarized
  - o Bigger Picture: Relevance and role of research area to larger field of special education established
- References

**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.

**Submitting assignments:** Students will submit assignments online. All written assignments should be submitted through Blackboard. Assignments should not be submitted by email unless

there is an emergency technical issue with Blackboard. Each assignment should be submitted by the start of class on the due date (4:30 PM). Assignments that are not submitted on Blackboard at the appropriate time are late. Late assignments will be accepted with a point deduction. All course assignments should be completed with graduate level use of content, grammar, spelling, and written expression clarity. If writing is an area of difficulty, you will need to visit the GMU Writing Center to work on these skills (<http://writingcenter.gmu.edu>).

Assignments submitted through Blackboard should be labeled with a filename that corresponds to: <your first initial followed by your last name with an abbreviated form of the assignment's name>. For example: NCerarCITI for CITI Module Completion Certificate, NCerarART1 or NCerarART2 for Article Reviews, or NCerarPAPER for Research Paper, or NCerarPPTPres for Research PowerPoint Presentation. I will return graded assignments to you via Blackboard.

### Other Assignments.

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

	Possible Points	Points Earned
Attendance	10	
Article Review	15 (x2)	
CITI Module	10	
Research Project	30	
Research Presentation	20	
Total	100	

### Schedule

Class	Date	Big Topics	Readings/Assignments Due
1	1/14	-Syllabus and Course Expectations -Quantitative/Qualitative Research Methodology Overview -Chapter 1: Intro. to Educational Research -List of Special Education Journals -Research Project Brainstorm	
2	1/21	-Conducting a literature search -Research Questions -Action Research	Read Chapter 1, 2, 3, & 12
3	1/28	- Research -Foundations of Educational Measurement -Data Collection - Nonexperimental Quantitative	Read Chapters 5, 6, & 7  <b>CITI Module Due</b>  <b>*Come to class with a topic or idea for final project</b>

4	2/4	- Experimental (Quantitative) Research Designs	<p>Read Chapters 4 (pp.94-104, 109-115) &amp; 8 (pp. 210-237)</p> <p>Read: Gersten, et al. (2005). Quality Indicators for Group Experimental and Quasi-Experimental Research in Special Education</p> <p><b>First Article Review Due</b></p>
5	2/11	- Understanding Statistical Inferences	<p>Read Chapter 9</p> <p>Read: Odum, et al. (2005). Research in Special Education: Scientific Methods and Evidence-Based Practices;</p>
6	2/18	- Qualitative Research design, data collection, and analysis	<p>Read Chapter 4 (pp. 105-108) &amp;10</p> <p>Read: Brantlinger et al. (2005). Qualitative Studies in Special Education.</p> <p><b>Second Article Review Due</b></p>
7	2/25	- Mixed-Method Design - Single Subject Design	<p>Read Chapter 4 (pp. 108-109), 11 &amp; 8 (pp. 238-248)</p> <p>Read: Horner, et al. (2005). The use of single-subject research to identify evidence-based practice in Special Education</p>
8	3/4	-Discussions/Conclusions -Action Research Revisited -Work on papers and posters	Read Chapter 13
9	3/11	- Presentations	<p><b>Research Paper Due</b></p> <p><b>Presentations Due</b></p>

## Appendix

## Research Application Paper Rubric (Option 1)

<i>Elements</i>	<i>Points</i>	<i>Comments</i>
<b>Title Page</b>	<i>/1</i>	
<b>Abstract</b>	<i>/2</i>	
<b>Introduction</b>	<i>/2</i>	
<b>Review of the literature</b>	<i>/3</i>	
<b>Research problem statement or questions</b>	<i>/4</i>	
<b>Method and design</b>	<i>/5</i>	
<b>Results</b>	<i>/4</i>	
<b>Discussion</b>	<i>/3</i>	
<b>Conclusion</b>	<i>/2</i>	
<b>References</b>	<i>/2</i>	
<b>Writing Style</b> <ul style="list-style-type: none"><li>- Appropriate usage of standard written English grammar, spelling, and clarity of expression</li><li>- APA format</li></ul>	<i>/2</i>	
<b>TOTAL</b>	<i>/30</i>	

## Research Review Paper Rubric (Option 2)

<i>Element</i>	<i>Points</i>	<i>Comments</i>
<b>Title Page</b>	/1	
<b>Abstract</b>	/2	
<b>Introduction</b>	/2	
<b>General topic</b> <ul style="list-style-type: none"> <li>- Trends</li> <li>- Thesis</li> <li>- Review criteria</li> </ul>	/5	
<b>Literature reviewed</b> <ul style="list-style-type: none"> <li>- First study- summary and discussion</li> <li>- Second study- summary and discussion</li> <li>- Third study- summary and discussion</li> <li>- More studies- etc.</li> </ul>	/7	
<b>Comparative analysis</b> <ul style="list-style-type: none"> <li>- Similarities (if any)</li> <li>- Differences (if any)</li> </ul>	/5	
<b>Conclusion/Summary</b> <ul style="list-style-type: none"> <li>- Key points summarized</li> <li>- Bigger Picture- Relevance and role of research area to larger field of special education established</li> </ul>	/3	
<b>References</b>	/3	
<b>Writing Style</b> <ul style="list-style-type: none"> <li>- Appropriate usage of standard written English grammar, spelling and clarity of expression</li> <li>- APA format</li> </ul>	/2	
<b>TOTAL</b>	<b>/30</b>	

## Paper Presentation Rubric

<i>Element</i>	<i>Points</i>	<i>Comments</i>
<b>Overall Content</b> <ul style="list-style-type: none"> <li>- Summary of key research paper points included</li> <li>- Comprehensive in nature</li> </ul>	<b>/4</b>	
<b>PowerPoint</b> <ul style="list-style-type: none"> <li>- Varied types of information included (narrative, data, charts, etc.)</li> <li>- Visual clarity</li> <li>- Creativity and appeal</li> </ul>	<b>/6</b>	
<b>Research Discussion/Question Answering</b> <ul style="list-style-type: none"> <li>- Engages peers in active discussion and the research project</li> <li>- Knowledgeably answers questions related to the project's research question and surrounding details</li> </ul>	<b>/4</b>	
<b>Oral Presentation</b> <ul style="list-style-type: none"> <li>- Most pertinent research paper points highlighted</li> <li>- Adequate voice projection</li> <li>- Eye contact made with audience</li> </ul>	<b>/4</b>	
<b>Detail Elements</b> <ul style="list-style-type: none"> <li>- Appropriate usage of standard written English grammar, spelling and clarity of expression</li> <li>- APA format</li> </ul>	<b>/2</b>	
<b>TOTAL</b>	<b>/20</b>	