



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

Summer 2016

EDSE 590 698: Special Education Research

CRN: 42639, 3 - Credits

<b>Instructor:</b> Dr. Nancy Cerar	<b>Meeting Dates:</b> 05/18/16 - 07/20/16
<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 - 8:30 pm
<b>Office Hours:</b> By appointment	<b>Meeting Location:</b> Off-campus/Other

***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.

Schedule Type: LEC

Hours of Lecture or Seminar per week: 3

Hours 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:

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

## **Required Textbooks**

McMillan, J.H. (2016). *Fundamentals of Educational Research* (7th ed.). Washington DC: Pearson.

## **Recommended Textbooks**

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

## **Additional Readings**

The textbook will be used as a framework for the course. Additional readings relevant to the course will be provided by the instructor 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 5: Instructional planning and strategies; Standard 6: Professional learning 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 George Mason University Disability Services and inform their instructor, in writing, as soon as possible. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor. [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). The result of late work will be the loss of 10% of total points per class until the assignment is received by the instructor. Individual situations will be addressed with students outside of class.

## **Tk20 Performance-Based Assessment Submission Requirement**

Every student registered for any Special Education course with a required performance-based assessment is required to submit the (NO ASSESSMENT REQUIRED FOR THIS COURSE) to Tk20 through Blackboard (regardless of whether the student is taking the course as an elective, a onetime course or as part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in Tk20 through Blackboard. Failure to submit the assessment to Tk20 (through Blackboard) will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Tk20 submission, the IN will convert to an F nine weeks into the following semester.

## **Grading Scale**

- A = 95 - 100 %
- A- = 90 - 94 %
- B+ = 86-89 %
- B = 80 - 85 %
- C = 70 - 79 %
- F = < 70 %

## **Assignments**

**Performance-based Assessment (Tk20 submission required).**

None.

**Performance-based Common Assignments (No Tk20 submission required).**  
**Research Application Project**

***Option 1: Application (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: Review:*** 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

### **Other 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. A screenshot of the certification of completion 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 as a researcher as to its quality (see articles: qualitative is Brantlinger, et al. (2005); quantitative is Gersten, et al. (2005); or single-subject Horner, et al. (2005)). You 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. Therefore, one quantitative article and one qualitative article will be reviewed for the course.

**Research Presentation:** Students will present the results of their research project to the class in a formal research presentation format. The presentation should be brief, approximately ten minutes, most of which should be spent on your methodology 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 under assignments. 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 (5:00 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.

	Possible Points	Points Earned
Attendance/Participation	10	
Reflections	5	
Article Review	15 (x2)	
CITI Module	15	
Research Project	30	
Research Presentation	10	
Total	100	

### Schedule

Class	Date	Big Topics	Readings/Assignments Due
1	5/18	-Syllabus and Course Expectations -Quantitative/Qualitative Research Methodology Overview -Chapter 1: Intro. to Educational Research -List of Special Education Journals -Research Project Brainstorm	Read Chapter 1
2	5/25	-Ethical issues, principles, and practices -Conducting a literature search -Research Questions	Read Chapter 2, 3, & 4 <b>Reflection 1</b>
3	6/1	-Action Research -Participants and sampling -Foundations of Educational Measurement	Read Chapters 4, 5, & 6 <b>CITI Module Due</b> <b>Reflection 2</b>
4	6/8	-Data Collection -Nonexperimental Quantitative	Read Chapter 7 & 8
5	6/15	-Experimental (Quantitative) Research Designs  -Single Subject Design	Read Chapters 9  Read: Gersten, et al. (2005). Quality Indicators for Group Experimental and Quasi-Experimental Research in Special Education  Horner, et al. (2005). The use of single-subject research to identify evidence-based practice in Special Education <b>Reflection 3</b>



6	6/22	-Understanding Statistical Inferences	<p>Read Chapter 10</p> <p>Read: Odum, et al. (2005). Research in Special Education: Scientific Methods and Evidence- Based Practices;</p> <p><b>First Article Review Due</b></p>
7	6/29	-Qualitative Research design, data collection, and analysis	<p>Read Chapter 11 &amp; 12</p> <p>Read: Brantlinger et al. (2005). Qualitative Studies in Special Education.</p> <p><b>Reflection 4</b></p>
8	7/6	-Mixed-Method Design	<p>Read Chapter 13</p> <p><b>Second Article Review Due</b></p>
9	7/13	-Discussions/Conclusions -Action Research Revisited -Work on papers and presentations	<p>Read Chapter 15</p> <p><b>Reflection 5</b></p>
10	7/20	- Presentations	<p><b>Research Paper Due</b></p> <p><b>Presentations Due</b></p>

## Appendix

<b>Research Application Paper Rubric (Option 1)</b>		
<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>	/2	
<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>	/3	
<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>	/2	
<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>	/2	
<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>	/1	
<b>TOTAL</b>	<b>/10</b>	