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

Spring 2013
EDSE 590 673: Special Education Research
CRN: 17837, 3 - Credit(s)

Instructor: Dr. Sharon Ray	**Meeting Dates:** 01/22/13 - 05/15/13
Phone: : Office (703) 993-5247 Cell (703) 673-8540	**Meeting Day(s):** Thursdays
E-Mail: sray4@gmu.edu *Best Contact Method	**Meeting Times:** 7:20PM-10:00PM
Office Hours: Before/After Class or By Appointment	**Meeting Location:** Arlington, ARLTB 335

> **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. Individual and group application activities
3. Videotapes and other relevant media presentations
4. Group and independent library research
5. Applications with relevant hardware and software
6. Class presentations of papers and research projects
7. 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. (2007). *Educational research: Fundamentals for the consumer* (6th ed.). Boston: AB Longman.

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

Required Resources
The George Mason Blackboard system will be used as an integral part of this course. It is important to access Blackboard several times a week between class sessions to check posted updates and messages. Additionally, class handouts will be posted on Blackboard for upcoming classes. The first night of class all handouts will be provided. After the first night, all handouts will be posted by Wednesday evening before Thursday's class. Students are responsible for downloading these handouts or printing hard copies for use in class from the second class onwards. You can access Bb at http://courses.gmu.edu .

Starting January 31st, be sure to come to class prepared with the week's electronic copies of materials or hard copies (whichever works best for you)!

Additional Readings
Other readings relevant to special education research applications will be assigned by the instructor as indicated by the needs and interests of the class.

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/ProfessionalStanda 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 RESOURES 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.
Class attendance and participation are essential to this course because of the complexity of the research knowledge at its core. Attendance points are earned for each class to give students experience with and class credit for engaging in key activities that educational researchers participate in on a regular basis. Students are expected to be timely; actively participate in activities; and remain for the duration of class time.

Late Work.
All assignments should be submitted *on or before* the assigned due date. **In fairness to students who make the effort to submit work on time, total assignment points will be deducted from your grade for late assignments.**

Course evaluation and final grades will be calculated based on the below percentages calculated from each individual student's point score out of the possible 100 point total. Late assignments will be accepted in the following manner (except for the Research Paper PowerPoint Presentation which will only be accepted on time):

- ➢ **5% point deduction – up to 1 week late**
- ➢ **10% point deduction – 1-2 weeks late**
- ➢ **25% point deduction – 2 weeks until the last class meeting**

Assessment of Course Requirements

Requirements of this course include readings, from your textbook and professional journal articles, and activities, which include in-class individual and group work, as well as independent assignments outside of class. The goal of all work for this course is to

increase your knowledge and skills in educational research to assist you in becoming a more informed consumer of research about the special education field in general and about evidence-based practices in special education specifically.

The core assignment for this course is the research application or research review project that will assist you in applying your literature review, research analysis, critical thinking, and professional writing skills. Besides the core assignment, there are several other forms of assessment implemented in this class, including both formative and summative evaluation measures. Students are expected to complete all forms of class assessment and final grading will be based on the cumulative points that students *__earn__* based on their performance on all course assessments. Student performance on assignments is expected to be both timely and of high quality.

Online submission of student work is required. All written assignments should be submitted through the Blackboard Digital Assignments tab. 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 (5PM). Assignments that are not submitted at the Blackboard Digital Assignments Tab 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 filenames that correspond to: <your first initial your last name abbreviated form of the assignment's name>. I will return graded assignments to you via the course Blackboard email. It is suggested that you download and save all returned assignments, as well as corresponding evaluations and comments. Below is example labeling for submission of all written assignments:

SRayCITI – CITI Module Completion

SRayART1 or SRayART2– Article Review Projects

SRayPAPER – Research Paper

Course Requirements Evaluation	
Assignment	**Points Earned/Total Points**
1. Attendance & Participation (1 pt. per class	/14

meeting)	
2. CITI Module Completion	/16
3. Quantitative Article Review Project	/15
4. Qualitative Article Review Project	/15
5. Research Paper	/30
6. Research Paper PowerPoint Presentation	/10
Total # of points earned	**/100**

Grading Scale

A = 95-100%

A- = 90-94%

B+ = 87-89%

B = 80-86%

C+ = 77-79%

C = 70-76%

F = 69% and below

Assignments

NCATE/TaskStream Assignments.
There are no NCATE/TaskStream Assignments for this course.

Common Assignments.
CITI Module Completion – *Due February 21st* **(16 points)**

The CITI Module involves the completion of GMU **Mandatory** Training for Persons Conducting Research Using Human Subjects 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. While your current research will be limited to work for course assignments, the awareness gained through the CITI modules are valuable for any researcher now and in the future. After completing

the modules, copy the certificate of completion document and paste it in a Word document, then submit this document via the Assignments Tab in Blackboard.

Research Paper – *Due May 9th* **(30 points), can be done in groups of 4 or less people**

Completion of 1 of 2 options:

Option 1: Research application project

Option 2: A research review project

Option 1: Research Application Project

The research application project is designed to provide experience in designing, implementing, and evaluating an application-based project in special education. Students should design a project, which they can easily implement in their current school site that investigates a pertinent educational issue or practice. Any of the research designs covered in class are appropriate for the project. **Be sure to have your research question and design approved by the instructor PRIOR to beginning implementation**. The project should be completed in sections by the students throughout the course of the semester. In class time will be provided weekly for students to share and get feedback in their groups. The final research application paper should be submitted via the Assignments Tab in Blackboard and should include the following:

- Title page
- Abstract
- Introduction
    - Quantitative: specific research questions need to be stated
    - Qualitative: general problem statement needs to be presented and clarified
- Review of the literature
    - Quantitative: review of the previous research studies that have been done in this area
    - Qualitative: brief review of the previous research studies that have been completed
- Research problem statement or questions
    - Quantitative: specific, narrow questions should be presented along with a hypotheses
    - Qualitative: general, foreshadowed questions should be introduced
- Method and design

- Quantitative: research design, participants, instruments, and procedures
  - Qualitative: research design, participants, and settings/sites
- Results
  - Quantitative: statistical explanations provided
  - Qualitative: narrative descriptions explained
- Discussion
- Conclusions
- References

Research Application Paper Rubric		
Element	*Points*	*Comments*
Title page	/1	
Abstract	/2	
Introduction	/2	
Review of the literature	/3	
Research problem statement or questions	/4	
Method and design	/5	
Results	/4	
Discussion	/3	
Conclusions	/2	
References	/2	
Writing Style • **Appropriate usage of standard written English grammar, spelling and clarity of expression** • **APA format**	/2	
TOTAL	**/30**	

Option 2: Research Review Project

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. If one or two individuals complete a research review project, 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 Assignments Tab in Blackboard and should include the following:

- Title page

- Abstract

- Introduction

- 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 evaluating relevant literature are specified

- Literature Reviewed – this section should be organized by the different studies reviewed
    - First study – summary and discussion
    - Second study – summary and discussion
    - Third study – summary and discussion, etc. until all studies covered

- Comparative analysis highlights the similarities and differences between studies summarized in the literature reviewed
    - Similarities (if any) between all studies presented, discussed, and evaluated
    - Differences (if any) between all studies presented, discussed, and evaluated

- Conclusion/Summary brings closure to the review
    - 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 Review Paper Rubric		
Element	*Points*	*Comments*
Title page	/1	
Abstract	/2	
Introduction	/2	
General topic • **Trends** • **Thesis** • **Review criteria**	/5	
Literature reviewed • **First study – summary and discussion** • **Second study – summary and discussion** • **Third study – summary and discussion** • **More studies – etc.**	/7	
Comparative analysis • **Similarities (if any)** • **Differences (if any)**	/5	
Conclusion/Summary • **Key points summarized** • **Bigger Picture – Relevance and role of research area to larger field of special education established**	/3	
References	/3	
Writing Style • **Appropriate usage of standard written English grammar,**	/2	

spelling and clarity of expression • **APA format**		
TOTAL	**/30**	

Other Assignments.

Attendance and Participation - *Weekly* **(1 point per class for a total of 14 points)**

Class attendance and participation are an important part of this class because of the specific and in depth information learned through the course. Attendance points are earned for each class to emphasize the importance of engaging in the learning activities and educational environment of the course. Students are expected to arrive on time; participate in all class discussions, presentations, and activities; come prepared with the day's assignment; and stay until the end of class. Attendance will be maintained through the artifacts students produce during class through group and individual work. For full attendance credit during each class, students must not only attend the full class session, but actively participate, work cooperatively, and turn in high quality class products. If you are unable to make any class sessions during the semester, please contact the instructor by phone or e-mail before the class session where you will be absent. In the rare event of an emergency or severe sickness, each student is given 1 "grace" absence without a point penalty, as long as the instructor is notified before the class session. In this case, it is still the student's responsibility to make arrangements to obtain notes, handouts, and lecture details from another student. ***Attendance points missed for more than one absence or any absence without instructor contact before class cannot be made up!* Two or more unexcused absences will result in no credit for this course.**

Qualitative and Quantitative Article Review Projects *– Due March 7th and April 11th*
(15 points each) (individual project)

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 also 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 also one that utilizes

qualitative research methods (discussion, narrative, etc.); and then complete a research question and answer sheet that asks the student to identify each article's essential elements; and critique each article's ideas and design. The article review projects should be submitted via the Assignments Tab in Blackboard. 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 article review/critique project. The review/critique question and answer sheet will be provided to students by the third class session.

Research Paper PowerPoint Presentation – *Due May 2ⁿᵈ or May 9ᵗʰ* (15 points)

As a culmination of the research paper (whether application or review project), students will share their research via a clear and well-prepared PowerPoint presentation as they might at a professional conference. The presentation should encompass the major elements of students' research papers, display information clearly and creatively, and be well-organized. To illustrate key content students can incorporate enlarged text, graphics, charts, and photos (as long as the students have a release for the photos). Students should be prepared to discuss their research and answer questions posed by class peers and the instructor during the PowerPoint presentation session. Students should be prepared to give an overview of their paper for approximately 15-20 minutes, using their PowerPoint as their visual for their presentation.

Paper Presentation Rubric		
Element	*Points*	*Comments*
Overall Content • **Summary of key research paper points included** • **Comprehensive in nature**	/2	
PowerPoint • **Varied types of information included (Narrative, data, charts, etc.)** • **Visual clarity** • **Creativity and appeal**	/5	
Research Discussion/Question Answering • **Engages peers in active discussion about the research**	/3	

project • **Knowledgeably answers questions related to the projects' research question and surrounding details** • **Acknowledges limitations of the research project**		
Oral Presentation • **Most pertinent research paper points highlighted** • **Adequate voice projection** • **Eye contact made with audience**	/3	
Detail Elements • **Appropriate usage of standard written English grammar, spelling and clarity of expression** • **APA format**	/2	
TOTAL	**/15**	

Schedule

	TENTATIVE COURSE SCHEDULE	
Date	**Topics**	**Assignments Due**
1/24	• **Syllabus and Course Expectations** • **Research Project Brainstorm**	
1/31	• **Chapter 1: Introduction to Educational Research**	➢ Read Text Chapter 1
2/7	• **Chapter 2: Research Problems**	➢ Read Text Chapter 2
2/14	• **Chapter 3: Locating & Reviewing Literature** • **Project Approvals**	➢ Read Text Chapter 3
2/21	• **Chapter 4: Participants and Sampling** • **GMU Library Research Presentation**	➢ Read Text Chapter 4 ➢ **Due: CITI Module**
2/28	• **Chapter 5: Foundations of Educational Measurement**	➢ Read Text Chapter 5
3/7	• **Chapter 6: Data Collection Techniques**	➢ Read Text Chapter 6 ➢ **Due: 1st Article Review Project**
3/14	• **Chapter 7: Nonexperimental Quantitative Research Design** • **Chapter 8: Experimental Research Designs**	➢ Read Text Chapters 7 & 8
3/21	• **Chapter 9: Understanding Statistical Inferences**	➢ Read Text Chapter 9
3/28	*Independent Research Paper Work Week &*	

TENTATIVE COURSE SCHEDULE		
Date	**Topics**	**Assignments Due**
	Individual Teacher/Student Research Paper Meetings as Needed	
4/4	*Spring Break*	
4/11	• **Chapter 10: Qualitative Research Design, Data Collection, and Analysis**	➢ Read Text Chapter 10 ➢ **Due 2nd Article Review Project**
4/18	• **Chapter 11: Mixed-Method Designs**	➢ Read Text Chapter 11
4/25	• **Chapter 12: Action Research**	➢ Read Text Chapter 12
5/2	• **Chapter 13: Action Research Discussion & Conclusions** • **First Half of Research Paper PowerPoint Presentations**	➢ Read Text Chapter 13 ➢ **Due Research Paper PPT Presentations (if it is your night to present)**
5/9	• **Second half of Research Paper PowerPoint Presentations** • **Course Evaluations**	➢ **Due Research Paper PPT Presentations (if it is your night to present)** ➢ **Due: Research Paper**

Appendix