George Mason University
College of Education and Human Development
Special Education Program

EDSE 590: Research Methods in Special Education
Fall 2010

Section #:   5S1
Time: 4:30 – 7:10 p.m. Mondays
Location: Kellar Annex 103

Instructor: Sheri Berkeley, Ph.D.
Email: sberkele@gmu.edu (best contact)
Phone: 703-993-9689
Office Hours: By appointment
                  Krug Hall 110A

Classmate Contact Information
Name: Email: Phone:
Name: Email: Phone:
Name: Email: Phone:
Name: Email: Phone:
Name: Email: Phone:

Course Description
Describes fundamental concepts and practices in educational research in special education. Specific applications of educational research methods to problems in special education will be covered. Emphasis is on reviewing and critiquing special education research, and applied classroom research for teachers.

Prerequisites
There are no *required* prerequisites for this course, but each Program in Special Education strongly *recommends a specific sequence*. Please refer to your Program of Studies to determine where this course fits within your overall program.

Student Outcomes
Upon completion of this course, students will be able to:
- Identify and understand different models 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
- Describe and implement teacher applications of classroom research to address specific classroom problems

Relationship of Courses to Program Goals and Professional Organizations
EDSE 590 is part of the George Mason University, Graduate School of Education, and Special Education Masters Degree Program. The program aligns with the standards for teacher licensure established by the Council for Exceptional Children, the major special education professional organization in the United States. As such the curriculum for the course includes competencies for teaching students with disabilities from preschool through grade 12. The CEC Standards are listed on the following web site: http://www.cec.sped.org/ps/perf_based_stds/common_core_4-21-01.html

Required Texts and Other Readings
McMillan, J. (2004). *Educational Research: Fundamentals for the Consumer* (5th Edition). AB
     Longman: Boston.
American Psychological Association (2010). *Publication manual of the American Psychological
     Association* (6th ed.). Washington, DC: Author.
Other readings relevant to special education applications assigned by instructor.

<u>Required</u> Access to Course Blackboard Site
Blackboard will be used to post important information for this course. Plan to access the Blackboard site several times per week; announcements and resources are posted on the Blackboard site in between class sessions. You are responsible for accessing the materials (for printed copies, etc.) prior to class. In addition, <u>you will need to login to Blackboard to upload assignments and to access the final exam for the course.</u>

Access Blackboard at http://courses.gmu.edu Click the "Login" tab. Your login and password is the same as your George Mason e-mail login. Once you enter, select EDSE 590.

Graduate School of Education Statements of Expectations
The Graduate School of Education (GSE) expects that all students abide by the following:
- Students are expected to exhibit professional behavior and dispositions. See gse.gmu.edu for a listing of these dispositions.
- Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.
- Students must agree to abide by the university policy for Responsible Use of Computing. See http://mail.gmu.edu and click on Responsible Use of Computing at the bottom of the screen.
- Students with disabilities who seek accommodations in a course must be registered with the GMU Office of Disability Services (ODS) and inform the instructor, in writing, at the beginning of the semester. See http://www2.gmu.edu/dpt/unilife/ods/ or call 703-993-2474 to access the ODS.

Other Course Expectations
1. <u>Professional Behavior:</u> For a satisfactory grade in the course, students are expected to attend all classes, arrive on time, be prepared for class, demonstrate professional behavior (see *Professional Disposition Criteria* at http://www.gse.gmu.edu for a listing of these dispositions), and complete all assignments with professional quality in a timely manner. To successfully complete this course, students need to adhere to the due dates for specific readings and assignments to be completed. If you feel you cannot adhere to the schedule noted in the syllabus, please contact the Instructor immediately to discuss options for withdrawing and completing the course during another semester.

2. Promptness: All assignments must be submitted *on or before* the assigned due date. **In fairness to students who make the effort to submit work on time, 5% of the total assignment points will be deducted each day from your grade for late assignments. Assignments will not be accepted more than 3 days late.**

3. Written Products: All written assignments must be prepared in a professional manner following guidelines stated in the Publication Manual of the American Psychological Association. All final products must be typed. Products that, in the judgment of the instructor, are unreadable or unprofessionally prepared will be returned un-graded or assigned a lower evaluation.

4. Writing Support: All assignments should reflect graduate level spelling, syntax, and grammar. If you are deficient in any of these areas, you will need to document your work with the GMU Writing Center during this course to improve your skills (http://writingcenter.gmu.edu).

5. Signature Assignment: For student evaluation, program evaluation, and accreditation purposes, students will be required to submit a signature assignment from each of their Special Education courses to Taskstream, an electronic portfolio system. In addition, students completing Midpoint and Final Portfolio courses will use Taskstream to create a full portfolio of their work based on assignments completed throughout their program. For this reason, students will need to retain electronic copies of all course products to document their progress through the GSE Special Education program. In addition to the signature assignment, products from this class can become part of your individual program portfolio used in your portfolio classes that documents your satisfactory progress through the GSE program and the CEC performance based standards.

   Note: **Every** student registered for any EDSE course as of the Fall 2007 semester is **required** to submit signature assignments to TaskStream (**regardless of whether a course is an elective, a "one time" course, or part of an undergraduate minor**). TaskStream information is available at http://gse.gmu.edu/programs/sped/. Failure to submit the assignment to TaskStream will result in reporting the course grade as Incomplete (IN). **Unless this grade is changed, upon completion of the required submission, the IN will convert to an F nine weeks into the following semester**.

   Please note: *if you do not upload your paper PRIOR to the final exam, the instructor may not be able to change an assigned grade of IN until the **next** semester begins*.**

ASSIGNMENTS

Regular Attendance & Participation

Students are expected to attend all classes, arrive on time, and stay for the duration of the class time. **Three or more absences will result in no credit for this course.** As you all lead active lives and circumstances sometimes happen at unfortunate times – so, if you are unable to attend class, it is your responsibility to make arrangements to obtain notes, handouts, and lecture details from another student. Students who are absent are held responsible for the material covered and assignments given and due. It is also recommended that you notify the instructor about absences in advance or within 24 hours after an absence.

Note: 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.

Participation as described above is evidence of professional behavior, and as such, points will be deducted for missed class activities in the following manner:

   1 missed activity = 1 point deduction (1% total)

2 missed activities = 4 point deduction (5% total)
3 missed activities = 5 point deduction (10% total and/or F for the course)

Human Subjects CITI Training Module Completion

GMU Mandatory Training for Persons Conducting Research Using Human Subjects 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. *This assignment will be evaluated as pass/fail.*

Research Application: Mini-Project

The research application mini-project is designed to provide experience in designing, implementing, and evaluating a research application project in special education. All activities for this assignment will be completed in research teams. *Specific directions and a rubric for this assignment will be provided by the instructor.*

Final Research Project: Research Review Paper

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 to blackboard) **AND** a hard copy of the project should be submitted no later than 4:30 pm on the due date. **This assignment is the signature assignment for the course**.

Effective literature reviews contain the following:
- **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).

Specific directions will be provided by the instructor and this assignment will be evaluated using the following rubric:

Scoring Rubric

Exemplary paper (36-40 points): Meets all of the criteria above.

Adequate paper (32-35 points): Good overall paper, lacking in one or two of the criteria for an exemplary paper.

Marginal paper (28-31 points): Overall, acceptable but with one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style, or review of relevant literature.

Inadequate paper (1-27 points): Paper with substantial problems in important areas such as writing, evaluation of research, overall thoughtfulness. Contains little or no information of value to special education practice**.**

Unacceptable/no paper (0 points): No paper turned in or paper was not approved for this assignment.

Exemplary paper	Adequate paper	Marginal paper	Inadequate paper	No paper
40 - 36	35 – 32	31 - 28	<28	0

Final Research Project Presentation
You will present the findings 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 use in your presentation – refer to the AERA Poster Session Guidelines document on Blackboard.
- Prepare a one-page summary hand-out for your audience and the instructor.

Specific directions for this assignment will be provided by the instructor.

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

GRADING

1.	Regular Attendance & Participation & Online Posts	10 points
2.	Research Application Mini-Project	20 points
3.	CITI Training	10 points
4.	Final Research Project: Research Review Paper	40 points
5.	Final Research Project: Presentation	10 points
6.	Final Exam	10 points
TOTAL		**100 POINTS**

Students can calculate their points earned at any time in the semester in order to determine what their grade-to-date is. This is particularly important for students to self-evaluate their performance prior to key dates in the George Mason University schedule, such as withdrawal dates with varying tuition penalties.

Student Self-Management for Calculating Course Grade	
Performance-Based Summative Evaluation	**Points Earned**
1. Regular Attendance & Participation & Online Posts	/10
3. Research Application Mini-Project Group Presentation	/20
4. CITI Training	/10
5. Final Research Project: Research Review Paper	/40
6. Final Research Project: Presentation	/10
7. Final Exam	/10
Total Course Points Earned	**/100**

Grading Scale:
A = 90-100%
B = 80-89%
C = 70-79%
F = <79%

CLASS TOPICS & DUE DATES

Date	Class Topic & Reading Assignments	Due Dates
8/30	• Course Overview • Special Education Research: Introduction to Types of Research • Writing Activity: o The Anatomy of a Research Article	Chapter 1
9/6	**NO CLASS: LABOR DAY**	
9/13	• Quality Indicators for Reviews of Research Literature: Quality Indicators • Research Problems & Purpose Statements • Writing Activity: o Developing an Introduction	Chapter 2

9/20	• Conducting a Library Search: Orientation to GMU Databases
	  • Identify Search Terms & Procedures
	• Writing Activities:
	  o Developing a Method Section
	• Introduction to Human Subjects Protection
		Chapter 3

9/27	**ONLINE CLASS:** • CITI TRAINING	
10/4	• Participants, Subjects, & Sampling • Writing Activities: o Peer Review	Chapter 5 **DUE:** CITI Training

	o Introduction to APA Style
	• Mini-project Overview (form groups)
	   o Develop Project Rationale & Purpose Statement
	   o Discuss Participants
		Certificate
		
		Online Post Due: Lit. Review Introduction & Method Section *draft*

10/11	**NO CLASS: COLUMBUS DAY**	

10/12
TUES
	• Experimental Research Designs
	• Writing Activities
	   o Peer Review
	   o Using Tables to Display Findings
	• Mini-project Group Work
	   o Determine Participants
	   o Discuss Research Design & Ways to Address
	     Threats to Validity
		Chapter 9
		
		Online Post Due: Lit. Review References (8-10 intervention studies) *draft*

10/18	• Foundations of Measurement
	• Writing Activity
	   o Peer Review
	• Mini-project group work
	   o Determine Research Design & Ways to Address
	     Threats to Validity
	   o Discuss Procedures (Intervention, Teacher Training,
	     Testing, Fidelity)
		Chapters 6
		
		Online Post Due: Lit. Review Results (1 paragraph summary of 1 study) *draft*

10/25	• Types of Educational Measures
	• Writing Activities:
	   o Peer Review
	   o Clearly Presenting Results (benefits of logical
	     organization & an overview)
	• Min-project Group Work
	   o Determine Procedures
	   o Discuss Educational Measures
		Chapter 7
		
		Online Post Due: Lit. Review Table *draft*

11/1	• Understanding Statistical Inferences
	• Writing Activity:
	   o Peer Review
	   o Writing Techniques for Discussions Sessions
	• Mini-project Group Work
	   o Determine Educational Measures
	   o Update (*informal presentation*) planning
		Chapter 10
		
		Online Post Due: Lit. Review 'Overview' of Results *draft*

11/8	• **Mini-project Updates (*informal presentations*)** • Class Activities: o Peer Editing: Revising Results and Discussion	**Online Post:** Results and Discussion *Draft*

11/15	• Other Quantitative Research Designs • Mini-project Group Work o Final Presentation Planning	Chapters 8 **Online Post:** Entire Final Paper *Draft*

11/22	• Mixed Method & Qualitative Research Designs
	   o Class Activity: Observation Techniques
	 • Mini-project group work
	   o Final Presentation Planning
		Chapters 11 & 12 (pp. 309-329)
		
		 DUE: Final Paper

11/29	• **Final Paper Poster Presentations** • Course Evaluations	**DUE:** Final Paper Poster Presentations
12/6	• **Mini-project Presentations** • Final Exam Review	**DUE:** Mini-project (Group) Presentations
12/13 or 12/20	• **Final Exam**	

NOTE: This syllabus may change according to class needs.