George Mason University College of Education and Human Development Special Education

EDSE 590: Research Methods in Special Education Spring 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: 703-993-3670

Office Hours: Mondays 2:00-4:00 or 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.

Please make sure that you are being advised on a regular basis as to your status and progress through your program. You may wish to contact Jancy Templeton, GMU Special Education Advisor, at jtemple1@gmu.edu or 703-993-2387. Please be prepared with your G number when you contact her.

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 quasiexperimental 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* (4th Edition). AB Longman: Boston.

American Psychological Association (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author. [5th edition ok]

Other readings relevant to special education applications assigned by instructor.

Required 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, you will need to login to Blackboard to upload assignments and to access the final exam for the course.

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 course.

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 demonstrate professional behavior and dispositions. See www.gse.gmu.edu for a listing of these professional dispositions.
- Students must follow the guidelines of the University Honor Code. See http://academicintegrity.gmu.edu/honorcode 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 Policy* at the bottom of the screen.
- Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing at the beginning of the semester. See www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.

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. <u>Promptness:</u> All assignments must be submitted <u>on or before</u> 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 (5th or 6th editions are acceptable). 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. <u>Signature Assignment:</u> 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. Be aware that any points earned for participation in class activities 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*.

On-Line Posts

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*.

Points will be deducted for missed posts in the following manner:

```
1 missed post = 2 point deduction (2% total)
```

2 missed post = 3 point deduction (5% total)

3 missed post = 5 point deduction (10% total)

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. <u>Specific directions and a rubric for this assignment will be provided by the instructor</u>.

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. <u>Specific directions will</u> be provided by the instructor and this assignment will be evaluated using the following rubric:

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).

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.

<u>Marginal paper (28-31 points):</u> 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.

<u>Inadequate paper (1-27 points):</u> 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.

<u>Unacceptable/no paper (0 points):</u> 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 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	10 points
2.	Online Posts	10 points
3.	Research Application Mini-Project	10 points
4.	CITI Training	10 points

5. Final Research Project: Research Review Paper
6. Final Research Project: Presentation
7. Final Exam
10 points
TOTAL
100 POINTS

Student Self-Management for Calculating Course Grade		
Performance-Based Summative Evaluation	Points Earned	
1. Regular Attendance & Participation	/10	
2. Online Posts	/10	
3. Research Application Mini-Project Group Presentation	/10	
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		

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.

Grading Scale:

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

CLASS TOPICS & DUE DATES

Date		Class Topic & Reading Assignments	Due Dates
1/25	•	Course overview	Chapter 1 (pp. 18-30)
	•	The anatomy of a research article	
		 Class Activity: Easy identification of the research article 	
2/1	•	Introduction to special education research	Chapters 2 & 3
	•	Writing an Introduction: Research Problems to Purpose	
		Statements	
	•	Library database orientation	
		o Class Activity: Search/write time	
2/8	•	Overview of Types of Research	Chapter 1 (pp. 1-18)
	•	Quality Indicators for Reviews of Research Literature	Assigned Reading TBA
		Writing a method Section	
		o Identify search terms & procedures	Online Post Due: Lit.
		o 10 articles search/write time	review introduction outline
	•	Introduction to APA style	

2/15	 Peer-editing in Academia Class Activity: Revising introduction & method sections (peer editing-online post) Mini-project overview Class Activity: Mini-project introduction & purpose statement (group work) Experimental Research Designs Internal & External Validity 	Chapters 9 & 12 (pp. 329-342) Online Post Due: Lit. review introduction & method section <u>draft</u>
2/22	 Peer-editing Class Activity: Editing references Participants, Subjects & Sampling Class Activity (group work): (1) Lit. review coding, (2) List all possible demographic and achievement data sources, (3) Mini-project research design & participants plan (group work) 	Chapter 5 Online Post Due: References (of 10 research articles to be synthesized)
3/1	 Measurement & Procedures (Intervention, Training, Testing, Fidelity) Class Activity (group work): (1) Lit. review coding, (2) Mini-project measures and procedures plan, (3) Mini-project planning 	Chapters 6 & 7
3/8	SPRING BREAK: NO CLASS	
3/15	 Data analysis & interpreting results Part I: literature reviews Class Activity: (1) Data analysis techniques for narrative literature reviews, (2) Writing a Lit. review results overview, (3) Writing techniques for discussions sessions Class Activity: Mini-project update 	Chapter 13
3/22	 Peer-editing Class Activity: Revising Lit. Review Results Overview & Table Data analysis & interpreting results part II: quantitative research Understanding Statistical Inferences Class Activity: Mini-project presentation planning 	Chapter 10 Online Post Due: Lit. Review Results Overview & Table
3/29	Mini-research Project Presentations	
4/5	 Other Quantitative Research Designs Introduction to Human Subjects Protection 	Chapters 8

	 Class Activity: Revising Results and Discussion Mixed Method & Qualitative Research Designs Class Activity: Observation Techniques 	329) Online Post: Results and Discussion <u>Draft</u>
4/19	ONLINE CLASS: • CITI TRAINING • Peer-editing	Online Post: Entire Final Paper <u>Draft</u>
4/26	 Final Paper Poster Presentations Course Evaluations 	DUE: CITI Training Certificate DUE: Final Paper
5/3	ONLINE CLASS: Final Exam Review	
5/10	• Final Exam	

NOTE: This syllabus may change according to class needs.