

GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
PROGRAM – SPECIAL EDUCATION

EDSE 590 Research Methods in Special Education (3 credits)

Teach for America Cohort, Section 661

Spring 2011

Thursdays, 7:30-10:00

Arlington Campus, FH113

Professor: Jodi M. Duke, Ed. D.

Office Location: Kellar Annex II, Room 105 **Phone:** 703-993-6555

E-mail: jduke4@gmu.edu

Office Hours: Mondays by appointment. Please contact me for a mutually agreeable time.

Virtual Office Hours: I am pleased to respond to questions by telephone or email; however, I am unable to be “on call, 24/7.” Therefore, I am also holding “virtual office hours.” Members of the class may email me at any time, but I am reserving two hours on Monday and on Wednesday afternoons to respond to emails. Please expect responses to your emails to be made during those hours.

Course Description: Describes fundamental concepts and practices in education research in special education. Specific application 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.

*Advising contact information: 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 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.
- Describe and implement teacher application 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_std/comm_core_4-21-01.html

Required Textbooks:

1. McMillan, J. (2004). *Educational Research: Fundamentals for the Consumer* (4th Edition). AB Longman: Boston.

Allyn and Bacon Companion Website: <http://www.ablongman.com/mcmillan5e>

This link is the website for the textbook, *Educational Research: Fundamental for the Consumer 5th edition*. This website provides learning objectives, chapter outlines, application exercises, and additional web sites.

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

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

It is highly recommended that students **bring the textbooks to class each week** as the instructor will make specific references to specific pages during class and students will be given classroom activities which will require textbook use.

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.

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].

- 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/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- 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.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

Campus Resources

- 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/>].
- 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/>].
- For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <http://gse.gmu.edu/>].

Other Course Expectations

1. **Professional Behavior:** 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. **Absences:** Understanding that you are individuals with full and active lives, who have made the commitment to regularly attend class, it is understood that there may be an instance when you are not able to attend. If this unlikely event should occur, 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. Each night, students will participate in class activities, which will contribute to the attendance/participation portion of the final grade. Points missed due to absences during class activities will NOT be made up. 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. **Three or more unexcused absences will result in no credit for this course.**

3. **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.**
4. **Electronic Etiquette:** Students are expected to participate actively in all class activities. **To this end, the use of laptop computers is prohibited in this class.** In addition, the use of electronic devices that produce sound or otherwise interfere with the learning of others (cell phones, etc.) is prohibited during class. Please turn these devices off or to vibrate before the start of class.
5. **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>).
6. **Written Products:** All written assignments must be prepared in a professional manner following guidelines stated in the Publication Manual of the American Psychological Association (6th edition). 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.
7. **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.*

****Each student is responsible for downloading class materials and bringing either a hard copy or the downloaded documents on their laptop to class. NO HANDOUTS WILL BE PROVIDED BEYOND THE FIRST NIGHT OF CLASS.**

ASSIGNMENT DESCRIPTIONS

1. Class Attendance & Participation

Completion of weekly class activities, participation in class discussions, and project presentation update discussions throughout the semester. Weekly warm ups and closure activities will be included in class participation points. **Points missed due to absences cannot be made up.** 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.

Also, please display **digital etiquette** during class sessions.

2. CITI Module Completion

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. In addition, if the information in any of the optional modules relates to your research, you are required to complete the appropriate module. These optional modules can only be opened after you finish the Basic Course. Copy certification of completion document and paste in a Word document, and submit via email for full credit. No partial credit will be given on this assignment.

3. Human Subjects

Completing the Human Subjects Review Board (HSRB) Application form gives hands-on experience in the multi-step process of legitimate educational research. GMU requirements for conducting research with human subjects includes:

By Federal Policy ALL research activities involving human participants that are directed by a GMU faculty member, staff member, or student or involve GMU faculty, staff, or students as participants, must be reported to the Office of Sponsored Programs for review. The Human Subjects Review Board (HSRB) serves as the GMU institutional review board (IRB). As specified in the Code of Federal Regulations, 45 CFR 46, Protection of Human Subjects, certain categories of human subjects research may be classified as exempt from further IRB review. The Office of Sponsored Programs will determine if an activity is exempt or not exempt from further HSRB review. You may not begin research involving human participants until you receive written notification from this office.

Students are required to completely fill out the HSRB application for their proposed research. All questions on the form should be answered as fully as possible based on a student's given research project. The HSRB application will be submitted via the Assignments Tab in Blackboard.

The template for the HSRB application form can be found at:

<http://www.gmu.edu/research/ORSP/HumanFormsAndInstructions.html>

HSRB Application Form Rubric

Evaluation Standards	Required Components	Points Earned
All Fill in the Blank and Checkbox Questions Answered Completely.		/4
Abstract Questions Fully Completed	<ul style="list-style-type: none"> • Research purpose • Characteristics of participants • Inclusion/exclusion criteria • Relationship to participants 	/6
Protocol Questions Fully Completed	<ul style="list-style-type: none"> • Benefits of study • Identification and recruitment of participants • Informed consent • Participant compensation • Minor assent (if needed) • Research design and methods • Potential risks • Deception statement • Brief description of the article's literature review 	/6
Supplementary Documentation (as needed)	<ul style="list-style-type: none"> • Existing records question • Informed consent documents • Assent forms • Data collection protocols • Cooperating institution approvals 	/2
Writing Style	<ul style="list-style-type: none"> • Grammar, spelling, and clarity of expression • APA format 	/2
Total Points Earned		/20

4. 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

5. *Research Application Project

The research application 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. 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 format recommended by the Publication Manual of the American Psychological Association (6th ed.).

Research Application Project Rubric

Evaluation Standards	Required Components	Points Earned
Abstract		/2
Introduction	<ul style="list-style-type: none"> • Problem is clear • Purpose (Research question and hypothesis) • Clear DV and IV 	/3
Review of Literature	<ul style="list-style-type: none"> • DV Literature • IV Literature • Other literature as needed • Clear and logical flow 	/8
Method	<ul style="list-style-type: none"> • Participants (3) <ul style="list-style-type: none"> ○ Subjects ○ Sampling method ○ Other participants • Setting (2) <ul style="list-style-type: none"> ○ School context ○ Study context • Materials & Procedures (5) • Design (2) <ul style="list-style-type: none"> ○ Design named and described ○ Rationale for chosen design • Statistical Analysis (2) 	/14
Results	<ul style="list-style-type: none"> • Descriptive • Inferential • Data table 	/3
Discussion	<ul style="list-style-type: none"> • Conclusions (address hypothesis) • Interpret results (link to literature) • Limitations • Recommendations 	/4
Writing Style & Mechanics	<ul style="list-style-type: none"> • APA style and format (3) <ul style="list-style-type: none"> ○ Reference list 	/6

	<ul style="list-style-type: none"> ○ In-text ○ Table(s) ○ Appendix ○ Title page ○ General ● Professionally written and free of spelling and grammar errors (3) 	
Total Points Earned		/40

6. Research 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 handout for your audience and the instructor.

Research Presentation Rubric

Evaluation Standards	Required Components	Points Earned
Research Question/Hypothesis	/1	
Highlights of Literature	/1	
Subjects & Setting	/1	
Materials & Procedures	/1	
Design & Statistical Analysis	/1	
Results (Descriptive & Inferential)	/1	
Discussion (C, I, L, R)	/1	
Presentation Style	/1	
Clear and Professional Visual	/1	
Response to Questions	/1	
Total Points:	/10	

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

*Indicates signature assignment to be included in the GSE Special Education student portfolio

Self-Monitoring Grade Sheet

	<i>Class Activities & Participation</i>	<i>CITI Module</i>	<i>Human Subjects Forms</i>	<i>Final Exam</i>	<i>Research Paper</i>	<i>Research Presentation</i>	<i>Total</i>
<i>Points Earned</i>							
<i>Possible Points</i>	10	5	20	15	40	10	100

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.**

It is strongly recommended that students retain electronic copies of all graded course products to document their progress throughout the GSE ED/LD program. Products from this class may become part of your individual professional portfolio used in your portfolio classes that documents your satisfactory progress through the GSE program and the CEC performance based standards. Graded assignments marked with an * are highly probable entries for a portfolio. As the GSE program moves toward electronic portfolios, it will be even more essential to have electronic access to all of your course products.

Grading Scale:

A 94 – 100 points

A- 90 – 93 points

B+ 86 – 89 points

B 82 – 85 points

B- 79 – 81 points

C 78 points and below

CLASS TOPICS & DUE DATES

Date	Class Topic & Reading Assignments	Readings Due for this Class
1/6	No Class: EDSE 792 Final Portfolio Meets	
1/13	<ul style="list-style-type: none"> • Course Overview • Special Education Research: Introduction to Types of Research • Writing Activity: The Anatomy of a Research Article 	<ul style="list-style-type: none"> • Chapter 1
1/20	<ul style="list-style-type: none"> • Research Problems & Purpose Statements • Variables & Hypotheses • Research Project Overview (form groups) • Writing Activity: Developing an Introduction 	<ul style="list-style-type: none"> • Chapter 2
1/27	<ul style="list-style-type: none"> • Quality Indicators for Reviews of Research Literature • Conducting a Library Search: Orientation to GMU Databases • Research Project Group Work: <ul style="list-style-type: none"> ○ Identify Search Terms & Procedures 	<ul style="list-style-type: none"> • Chapters 3 & 4
2/3	<ul style="list-style-type: none"> • Participants, Subjects, & Sampling • Ethical Standards: Introduction to Human Subjects Protection • Introduction to APA Style • Writing Activity: APA Article Activity • Research Project Group Work: <ul style="list-style-type: none"> ○ Develop Project Rationale ○ Purpose Statement and Discuss Participants 	<ul style="list-style-type: none"> • Chapter 5
2/10	<ul style="list-style-type: none"> • Educational Measurement <ul style="list-style-type: none"> ○ Validity of Measurement ○ Reliability of Measurement ○ Types of Educational Measures • Research Project Group Work <ul style="list-style-type: none"> ○ Determine Participants ○ Discuss Educational Measures ○ Discuss Research Design & Ways to Address Threats to Validity • Writing Activity: Developing a Method Section 	<ul style="list-style-type: none"> • Chapters 6 & 7
2/17	Online Class: CITI Training Module	<ul style="list-style-type: none"> • DUE: HSRB Forms for Group Research Project • Chapter 12

2/24	<ul style="list-style-type: none"> • Experimental Research Designs • Research Project Group Work <ul style="list-style-type: none"> ○ Determine Research Design & Ways to Address Threats to Validity ○ Discuss Procedures (Intervention, Teacher Training, Testing, Fidelity) 	<ul style="list-style-type: none"> • DUE: CITI Module • Chapter 9
3/3	No Class: EDSE 792 Final Portfolio	
3/10	<ul style="list-style-type: none"> • Single-Subject Research Design • Clearly Presenting Results (benefits of logical organization & an overview) • Writing Activity: Create Tables to Display Data • Research Project Work <ul style="list-style-type: none"> ○ Using Tables to Display Findings ○ Outline Results Section 	
3/17	No Class Meeting: Research Project Groups Meet Individually or with Dr. Duke as Needed	
3/24	<ul style="list-style-type: none"> • Understanding Statistical Inferences • Writing Activity: Writing Techniques for Discussions Sessions • Research Project Group Work <ul style="list-style-type: none"> ○ Discuss Project Status ○ Discuss Data ○ Divide Writing Tasks ○ Finalize Plans 	<ul style="list-style-type: none"> • Chapter 10
3/31	<ul style="list-style-type: none"> • Non-experimental Quantitative Research Designs • Research Project Group Work <ul style="list-style-type: none"> ○ Final Project and Presentation Planning 	<ul style="list-style-type: none"> • Chapter 8
4/7	<ul style="list-style-type: none"> • Mixed Method & Qualitative Research Designs • Class Activity: Observation Techniques • Research Project group work <ul style="list-style-type: none"> ○ Presentation Planning 	<ul style="list-style-type: none"> • Chapters 11 & 12 (pp. 309-329)
4/14	<ul style="list-style-type: none"> • Drawing Conclusions from Special Education Research • The Intelligent Consumer • Writing Activity: Writing Results and Discussion Sections • Research Project Group Work: <ul style="list-style-type: none"> ○ Results and Discussion ○ Peer Editing of Paper Draft ○ Presentation Preparation 	<ul style="list-style-type: none"> • Chapters 13 & 14
4/21	No Class: Spring Break	
4/28	<ul style="list-style-type: none"> • Final Paper Poster Presentations • Final Exam Review 	DUE: <ul style="list-style-type: none"> • Final Paper • Final Paper Poster

		Presentations
5/5	<ul style="list-style-type: none">• Course Evaluations• Final Exam	
5/12	No Class: Final Portfolio Calls	

NOTE: This syllabus may change according to class needs.