# **George Mason University Graduate School of Education Program: Special Education**

EDSE 590: Research Methods in Special Education

###### Summer 2009

**Instructor**: Michael Neall **Class meeting times**: M,W 4:30-7:10

**Class location**: Innovation Hall 333/209 M,W 7:20-10:00

**Phone**: 703-583-1669 **Office Hours**: By Appointment

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### *Course Description*

This course 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.

***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

## Nature of Course Delivery

Learning activities include the following:

1. Class lecture, discussion, and participation.

2. Videotapes and other relevant media presentations.

1. Study and independent library research.
2. Applications with relevant hardware and software.
3. Application activities
4. Class presentations of papers and research projects.

**Representative Required Texts**

McMillan, J.H. (2000). *Educational research: Fundamentals for the consumer* (5th ed.). Reading, MA: Addison-Wesley Longman.

American Psychological Association (2001). *Publication manual* (5th ed.). Washington, DC: Author.

Other readings relevant to special education/research applications assigned by instructor.

**NOTE:**

This syllabus may change according to class needs.

If you need course adaptations or accommodations because of a disability or if you have emergency medical information to share with instructor or need special arrangements, **please call and/or make an appointment with instructor as soon as possible.**

**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 Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See [www.gmu.edu/student/drc](http://www.gmu.edu/student/drc) or call 703-993-2474 to access the DRC.
* 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 a F nine weeks into the following semester.

**COURSE TOPICS**

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| --- | --- | --- | --- |
| **Date** | **Reading Due** | **Concepts/Activities** | **Assignments/Quizzes Due** |
| 6/1 | None | Research as a Process of Inquiry  Finding a Research Topic |  |
| 6/3 | Chapters 1 & 12 | Action Research  Questions  Variables and Hypotheses |  |
| 6/8 | Chapter 2 & 3 | Use of the Internet  Database Searching | Article Critique #1 |
| 6/10 | Chapters 4 & 5 | Participants, Subjects, & Sampling |  |
| 6/15 | Chapters 6 & 7 | Educational Measurement  Types of measures | Research Topic Due  Article Critique #2 |
| 6/17 | Chapter 8 | Non-experimental Design |  |
| 6/22 | Chapter 9 | Experimental Design  Discussion: Research Topic and Design | Article Critique #3 |
| 6/24 | Chapter 9 | Experimental Design: Putting it All Together  Class activity |  |
| 6/29 | Chapter 10 | Inferential Statistics | Article Critique #4 |
| 7/1 | Chapter 10 | Introduction to SPSS  Review Inferential Statistics |  |
| 7/6 | Chapter 13 | Discussion and Conclusions  In-Class Article Critique  SPSS Practice | Article Critique #5 |
| 7/8 | Chapter 11 | Qualitative Research Designs  SPSS Practice |  |
| 7/15 | Chapter 14  Chapter 12 | Putting it all Together  Research in Practice  Mixed Methods | Final Paper Due |
| 7/20 |  | Final Presentations |  |

### ASSIGNMENTS\*

***Self-Assessment Quizzes (30 points)***

An essential part of the course study is provided online [www.ablongman.com/mcmillan5e](http://www.ablongman.com/mcmillan5e), as indicated on page xix of the McMillan text. Prior to each class the following activities and should be completed. Students should log into the website and select the chapter they will be studying, review the objectives be studied in the respective chapter of the McMillan text and take the self-assessment quiz. Score the quiz electronically. If you achieve 70% or higher on the quiz you have passed. Print and save your quiz. Send e-mail copy of the quiz to yourself for your records. If you achieve less than 70% on the quiz review your incorrect answers study the text and retake the quiz. You may retake the quiz as many times as you wish until you achieve the passing score. Grading is pass fail only. At the end of the course, you will hand in a compilation of the first pages of each quiz. Grading will be assigned based on the completeness of the quizzes AND the time in which they were completed.

***Reflective Journals (35 points)***

Research is a process of inquiry. At the end of each class, students will complete a reflective journal entry. The entry should consist of important ideas from the reading and/or lecture, as well as thoughts regarding the class research project. Journals should be kept in a composition book and will be collected periodically (without notice).

***Critique of Research Articles (40 points)***

Students will be provided an electronic copy of a journal article by the instructor. Students are expected to read and follow specific directions for completion of each critique. The set of directions will be provided the week before each critique is due. **Please submit a hardcopy of the critique at the beginning of class for credit**. As with the self-assessment quiz, if you must miss a class you may e-mail copy of your critique to the instructor. Please use MS Word format only for the attached file. There are no allowances for late critiques.

***Class Attendance and Participation (45 points)***

Students are expected to attend class and participate in all assignments, group activities, presentations and class discussions. The success of any course in this field stems largely from the scholarly and collegial culture created by attendance and commitment to the class. Points are given for active participation in class. **Although attendance is expected, alternative arrangements can be made in advance for missed classes. Absences without prior notice will result in a loss of points.**

While we all have busy lives and personal and professional commitments outside of this course, you have made a commitment to be present and to complete the requirements therein. Therefore choose someone as a buddy that you can depend on to take notes and pickup materials if you must be absent. Notify that person in sufficient time for them to be of assistance to you. If you must be absent, please notify your instructor and e-mail any due assignments. Assignments not submitted by the due date, without prior arrangement, will be counted as late.

***Journal Articles (50 points)***

Fifteen journal articles are required for the research project. These articles form the basis of the literature review. Bring research articles to each class (beginning with class #2) and be prepared to summarize the article in a pair or small group. Summaries should include: the research problem, the research questions, research design and methods, a synopsis of the results, and conclusions. Be prepared to discuss how the article informs your research project.

**\**Research Project and Oral Presentation (100 points)***

Students will:

Select an appropriate research methodology to investigate a problem of interest in the classroom. Students will prepare a research report on this project using APA format. Rather than conduct the study students will include a section demonstrating knowledge of the statistical measures used using fabricated data. The grading rubric will be provided in class. Students should submit two copies of the paper, and a stamped, self-addressed mailing envelop for the return of the paper. Students will present the results of their research to the class in a formal research presentation. Students are expected to fully understand their study sufficiently to answer questions from students and the instructor.

**Preferred Submission Procedures**: All assignments are due on the day listed unless prior arrangements have been made. Hard copy submission of papers is preferred, however emailed copies are acceptable. Electronic submissions will be returned electronically with comments. All papers are due by the date listed in the syllabus regardless of class attendance.

Late Assignments: Assignments not turned in during class or electronically by the end of class will be counted as late and penalized 10% per day. Work more than one week late, without prior arrangements, will not be accepted.

## Grading criteria

95 –100% = A

90 – 94% = A-

# 80 – 89% = B

# 70 – 79% = C

< 70% = F

**NOTE**: Cell phones should be set to vibrate so as not to disrupt class. Additionally, text messaging during class is prohibited. During some class sessions computers will be utilized. Please refrain from using the computers until appropriate directions have been given.