

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

EDSE 590-668: Special Education Research CRN: 80894, 3 - Credit(s) Fall 2012

Instructor: Dr. Kelly Henderson	Meeting Dates: 09/11/12 - 11/13/12
Phone: 703-282-3408	Meeting Day(s): Tuesday
E-Mail: khender8@gmu.edu	Meeting Times: 4:30pm - 8:30pm
Office Hours: by appointment	Meeting Location: OCL

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.

Advising Contact Information:

Please make sure that you are being advised on a regular basis as to your status and progress through your program. For assistance contact the Special Education Advising Office at (703)993-3145.

Nature of Course Delivery:

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Application activities
- 3. Small group activities and assignments
- 4. Video and other media supports
- 5. Research and presentation activities
- 6. 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 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.
- Critically evaluate education research and describe implications for educational practice.

Required Textbooks:

American Psychological Association (2009). *Publication manual of the APA (6th ed.)*. Washington, DC: Author. *ISBN: 1-4338-0562-6; ISBN 13: 978-1-4338-0562-2*

McMillan, J.H. (2012). *Educational research: Fundamentals for the consumer (6th ed.)*. Boston: Pearson Education. *ISBN-10: 0132596474; ISBN-13: 9780132596473*

It is highly recommended that students bring the McMillan textbook to class each week as the instructor may make specific reference to it during class.

Other reading relevant to special education research applications will be assigned by the instructor as appropriate.

Recommended Textbooks:

None.

Required Materials:

This course uses a Blackboard-like **Organization** at MyMason online. This provides access to most of the assigned readings and other links of interest. Click on the Organizations tab at https://mymasonportal.gmu.edu/webapps/portal/frameset.jsp. You must be enrolled in the Organization to have access. Email Dr. Henderson immediately if you cannot access it.

Additional Readings:

See schedule, below.

Course's Relationship to Program Goals and Professional Organizations:

This course is part of the George Mason University, Graduate School of Education (GSE), Special Education Program for teacher licensure in the Commonwealth of Virginia in the special education areas of Special Education: Students with Disabilities who Access the General Curriculum K-12. 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. *NOTE: NCATE Assessments (in many but not all courses) may address additional CEC standards.

Policies (Attendance and Late Work Policies):

Attendance Policy: Students are expected to attend class and actively participate in all assignments, group activities, and class discussions. Active participation includes the asking of questions and the presentation of one's own understanding with regard to the readings and lectures as well as interactive discussion and participation in activities with other class members. This will require all students to complete the required readings, activities, and assignments for that specific class meeting.

While we all have busy lives as well as professional and personal commitments outside this course, you have made a commitment to be present for this course and to complete the requirements therein. If an extenuating circumstance was to occur and prevent you from attending class, please arrange to obtain notes and handouts from another student. Notify that person in sufficient time for them to be of assistance for you.

Late Work Policy: Points will be deducted for assignments not submitted on time (the beginning of the class meeting time). Generally, points equal to half of a letter grade are deducted for each class session past due.

Course Requirements, Performance-Based Assessment, and Evaluation Criteria: In-class Pop Quizzes: To reinforce the textbook content and encourage thorough reading, Dr. Henderson will give unannounced pop quizzes that include questions similar or identical to the online practice tests. These pop quizzes will be given via the classroom's lab computers or in paper. At least three will be given throughout the semester and will be averaged and collectively contribute 10 points of your semester grade. There are no make-ups for these quizzes.

Critique of Research Article: There is one research article critique required. The article will be individually selected by each student and may be related to the research topic selected for the research application paper. When submitting a hard copy of the critique you have selected, the original article must be included. The copy of the original article is necessary so the instructor will be able to review the article as necessary to evaluate the critique. Grading Rubric is available on Bb; *attach a blank, ungraded rubric* to your assignments.

CITI Module Completion: The CITI Module involves the completion of GMU **Mandatory** Training for Persons Conducting Research Using Human Subjects ("Group 1 Social & Behavioral Research, Basic Course") that is accessed at <u>http://www.citiprogram.org</u>. 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 can complete the appropriate module for up to 3 extra credit points. 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.

Quantitative Analysis: To increase familiarity with existing national and state data sources, students will identify and examine currently available data from one published national or state data source. In addition to examining and describing the data, students will write a "conclusions" section identifying and commenting on the major findings, with respect to their utility to school and classroom settings. A grading rubric is available on Bb; *attach an ungraded rubric* to your assignment.

Research Application: 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 the format recommended by the Publication Manual of the American Psychological Association (6th ed.). This includes Title page; Abstract; Introduction and purpose; Method (participants, materials, procedures); Findings or Results; Discussion; References. A grading rubric is on Bb; *attach an ungraded rubric* to your assignment.

Research Presentation: Students will present the results of their research project to the class in a formal research presentation format. The presentation should not exceed 8 minutes, most of which should be spent on your method and findings. The use of audiovisual, posters, handouts, or other presentation materials is encouraged. Grading rubric is on Bb; *attach an ungraded rubric* to your assignment.

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

Grading Scale:

95 - 100% = A 90 - 94% = A- 80 - 89% = B 70 - 79% = C<70% = F

Schedule:

Individual Student Grade Sheet

	Attendance participation	Critique	CITI module	Quant. Analysis	Pop Quizzes	Research Project	Research Presentation	Total
Earn								
Points	10	10	10	15	10	35	10	100

Tentative class schedule, subject to change:

Class	Date	Big Topics	 Readings/Assignments Due McMillan – Chap. 1 & 2 APA – Ch. 2; skim Ch. 1, 3 & 6 "Teachers as Researchers" article, Babkie & Provost Activate GMU email account and check that you can access Blackboard via MyMason Organization. Email me by noon Friday 9/14 if you cannot. 		
1	9/11	 Introductions Start of Class Logistics Introduction to Research in Education Research Problems Variables, Hypotheses, & Research Questions Introduction Components of Research Report or Article APA Writing Style Research Problems in Special Education Ethical Standards for Conducting Research Implementing Research in Your Classroom Quantitative and Qualitative Research Characteristics 			
2	9/18	 Hypotheses – Generating and Writing Begin Purpose and Steps for Conducting a Literature Review Finish Purpose and Steps for Conducting a Literature Review 	 McMillan – Chap. 3 & 4 Print out or be able to access electronic copies of "Research in Special Education" by Odom et al. and "Peer Assisted Learning strategies" by Saenz, Fuchs & Fuchs APA Editing Activity, in class 		

	0/25	 Primary and Secondary Sources Writing a Review of the Literature Characteristics of Quality Research Article Critiques Subjects, Participants, and Sampling Probability and Non- probability Sampling 	
3	9/25	 Locating Literature Educational Searches via the Internet Identifying research sources 	 Meet at GMU's Prince William campus (room TBA), presentation by Janna Mattson, MLS, Social Sciences Liaison Librarian. Directions- <u>http://library.gmu.edu/libinfo/pwl.</u> <u>html</u>. If possible, bring laptops. Read "Research in Special Education: Scientific Methods and Evidence-Based Practices" (Winter 05 EC articles, Odom et al.)
4	10/2	 Descriptive Statistics: Definition and Essential Terms Validity and Reliability Measurement, Evaluation, and Assessment Educational Measures Questionnaires, Observations, & Surveys 	 McMillan – Chap. 5 & 6 Research Article Critique due
5	10/9	 Experimental and Non- Experimental Quantitative Research Designs Descriptive, Comparative, & Correlational, & Causal- Comparative Studies Validity: Internal & External Types of Experimental Designs National data resources Introduction to statistical analyses Making Statistical Inferences Interpreting the Findings 	 McMillan – Chap. 7 & 8 (except pp.238-242) Read "Quality Indicators for Group Experimental and Quasi-Experimental Research in Special Education" (Winter 05 EC articles, Gersten et al.) Read "Evaluating the Quality of Evidence from Correlational Research for Evidence-Based Practice" (Winter 05 EC article, Thompson et al.)

		• Statistical Analysis software	
6	10/16	 Qualitative Research Mixed Methods Design Action Research 	 Read "<u>Qualitative Studies in</u> <u>Special Education</u>" (Winter 05 EC articles, Brantlinger et al.) McMillan – Chap. 10, 11, 12
7	10/23	 Single Subject Research Designs Inferential Statistics Null Hypotheses Type 1 & Type 2 Errors Statistical Significance 	 Read "The Use of Single-Subject Research to Identify Evidence- Based Practice in Special Education" (Winter 05 EC articles, Horner, et al.) McMillan – pp. 238-242 Quantitative Analysis due
8	10/30 No class 11/24 Thanksgiving	 Discussion Section of a Research Report: Interpretations, Conclusions, Recommendations, and Limitations Connecting the Results Back to the Hypothesis 	 McMillan- Chap. 13 Read "Tips for Readers of Research-'Seeing Through' the Graphs" and "Trouble with Research", Bracey CITI Basic Course completion certificate due
9	12/6	 Catch up on previous topics Individual consultation on final projects/presentations 	
10	11/13	 Research Project Presentations End of Course Logistics 	Research Projects Due

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. http://cehd.gmu.edu/values/Revised 06/25/12

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

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.