

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

#### Fall 2016

EDSE 841 001: Intervention Research in Special Education CRN: 71653, 3 - Credits

<b>Instructor:</b> Dr. Sheri Berkeley	<b>Meeting Dates:</b> 08/29/16 - 12/20/16
<b>Phone:</b> 703-993-9689	Meeting Day(s): Tuesday
E-Mail: <a href="mailto:sberkele@gmu.edu">sberkele@gmu.edu</a> (best contact)	<b>Meeting Time(s):</b> 7:20 pm - 10:00 pm
Office Hours: by appointment	Meeting Location: Fairfax

**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.

## **Course Description**

Provides advanced graduate students with opportunities for in-depth study, analysis, and discussion of original intervention research in special education. Emphasizes analyzing research methodology, coding original intervention research, analyzing results, synthesizing findings, formulating future research questions relevant to individuals with disabilities, and gaining an understanding of the submission process for conferences and publications.

**Prerequisite(s):** Admission to PhD in education program, or permission of instructor

Co-requisite(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. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

#### **Nature of Course Delivery**

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Application activities

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- 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:

- 1. Describe various methodologies used in special education intervention research.
- 2. Demonstrate how to analyze, critique, and synthesize special education intervention research.
- 3. Write syntheses of special education intervention research.
- 4. Describe issues surrounding special education intervention research and identify important intervention researchers.
- 5. Discuss the publication process, including addressing various target audiences and target journals.

#### **Required Textbooks**

Lipsey, M. W., & Wilson, D. B. (2001). Practical meta-analysis. *Applied social research methods series (Volume 49)*. Thousand Oaks, CA: Sage.

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

#### **Additional Required Readings**

Meta-Analysis? Exceptionality, 9, 185-197.

Gersten, R., Fuchs, L., Compton, D., Coyne, M., Greenwood, C., & Innocenti, M.S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children*, 71, 149-164.

Horner, R.H., Carr, E.G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single subject research to identify evidenced-based practice in special education. *Exceptional Children*, 71, 165-180.

Kavale, K. A. (2001). Meta-analysis: A primer. Exceptionality, 9, 177-183.

Mastropieri, M.A., Berkeley, S., McDuffie, K., Graff, H., Marshak, L., Conners, N., Diamond, C.M., Simpkins, P., Bowdey, F. R., Fulcher, A., Scruggs, T.E., & Cuenca-Sanchez, Y. (2009). What is published in the field of special education? An analysis of 11 prominent journals. *Exceptional Children*, 76, 95-109.

Odom, S.L., Brantlinger, E., Gersten, R., Horner, R.H., Thompson, B., & Harris, K.R. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children*, 71, 137-148.

- Parker, R. I., Vannest, K. J., & Davis, J. L. (2011). Effect size in single-case research: A review of nine nonoverlap techniques. *Behavior Modification*, *35*, 303-322.
- Scruggs, T. E., & Mastropieri, M. A. (2013). PND at 25: Past, present, and future trends in summarizing single-subject research. *Remedial & Special Education*, 34, 9-19.

#### **Required Resources**

Blackboard will be used to post important information for this course. 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 for the course.

## Access Blackboard through **myMason**:

- →Go to the GMU homepage: http://www.gmu.edu/
- →Click on MyMason on the top of the page.
- →Enter your user login and password (the same as your GMU email login and password)
- → Click the "Courses" tab at the top of the screen
- → Select your course from the middle column.

#### **Recommended Readings**

- Cooper & Hedges, L. V. (Eds.). (1994). *The handbook of research synthesis*. New York: Russell Sage Foundation.
- Glass, G. V. (1976). Primary, secondary and meta-analysis of research. *Educational Researcher*, 5, 3-8.
- Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. Orlando, FL: Academic press.
- Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.
- Lessen, E., Dudzinski, M, Karsh, K., & Van Acker, R. (1989). A survey of ten years of academic intervention research with learning disabled students: Implications for research and practice. *Learning Disabilities Focus*, *4*, 106-122.
- Rosenthal, R. (1991). *Meta-analytic procedures for social research. Applied social research methods series (vol. 6).* Thousand Oaks, CA. Sage.
- Sharpe, D. (1997). Of apples and oranges, file drawers and garbage: Why validity issues in metaanalysis will not go away. *Clinical Psychology Review*, 17, 881-901.
- What Works Clearinghouse. (2013). *What works clearinghouse: Procedures and standards handbook (version 3.0)*. Retrieved from: http://ies.ed.gov/ncee/wwc/pdf/reference\_resources/wwc\_procedures\_v3\_0\_draft\_standards\_handbook.pdf

#### **Course Relationships to Program Goals and Professional Organizations**

Course Relationship to Program Goals and Professional Organizations This course is part of the George Mason University, College of Education and Human Development (CEHD), Graduate

School of Education, Special Education, CEHD PhD in Education Program. This program complies with university and program standards.

#### **GMU Policies and Resources for Students:**

- a. Students must adhere to the guidelines of the George Mason University Honor Code [See <a href="http://oai.gmu.edu/the-mason-honor-code/">http://oai.gmu.edu/the-mason-honor-code/</a>].
- b. Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/].
- 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 George Mason University Disability Services and inform their instructor, in writing, as soon as possible. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor. [See <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>].
- 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 <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>].

#### **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. [See <a href="http://cehd.gmu.edu/values/">http://cehd.gmu.edu/values/</a>]

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

## **Course Policies & Expectations**

Attendance.

Students are asked to attend all classes on time, be prepared, post to Blackboard discussion board, and actively participate and support the members of the class learning community.

Late Work.

Late will not be accepted.

#### Tk20 Performance-Based Assessment Submission Requirement

Every student registered for any Special Education course with a required performance-based assessment is required to submit the (*NO ASSESSMENT REQUIRED FOR THIS COURSE*) to Tk20 through Blackboard (regardless of whether the student is taking the course as an elective, a onetime course or as part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in Tk20 through Blackboard. Failure to submit the assessment to Tk20 (through Blackboard) will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Tk20 submission, the IN will convert to an F nine weeks into the following semester.

## **Grading Scale**

A = 90-100%

B = 80-89%

C = 70-79%

F = <79%

Evaluation will be based upon a point system. The point value for each assignment is as follows:

Class Participation & Blackboard Posts	30
Paper Introduction	10
Final Paper	50
Project Presentation	10
TOTAL POINTS	100

#### **Assignments**

Performance-based Assessment (Tk20 submission required).

Not applicable for this course.

# Performance-based Common Assignments (No Tk20 submission required). Participation & Homework (30 points)

Students are asked to attend all classes on time, be prepared, and actively participate and support the members of the class learning community. This includes being prepared for and actively participating in discussions and class activities, and submitting homework (HW) that is complete and on-time. *Specific guidance for the content of HW will be provided by the instructor*.

**Note:** In some instances, a class absence is unavoidable. However, course activities are group based and are dependent upon your presence to be meaningful to both you and your classmates. Therefore, a HW submission without your presence will only be allowed on one occasion in the course.

### Rubric for Participation & Homework

- Exemplary (30): The student attends all or almost all classes (student may miss one class with notice to instructor), is always on time, and is prepared (including posting HW on time to Blackboard even if absent); and the student actively participates and supports the members of their learning group and the class.
- Adequate (25): The student is usually on time, usually prepared for class, and participates in group and class discussions, but may miss participation points due to multiple absences (two absences) and/or failure to prepare for a class activity (including posting HW to Blackboard on time).
- Marginal (20): The student is often late for class and/or misses numerous participation opportunities due to absences (3 or more) or failure to prepare for two class activities (including posting HW to Blackboard on time).
- Inadequate (0 -15 points): The student is frequently late for class. Student misses numerous participation opportunities due to absence (3 or more) or fails to prepare for three or more class activities. Instructor is not notified of absences. The student does not actively participate in discussions. The student may fail to exhibit professional behavior and dispositions. Excessive absences can result in additional penalties and potential withdrawal from class.

## **Paper Introduction** (10 points)

Students will write a five page introduction to their paper to demonstrate an understanding of the educational problem that will be addressed by conducting a systematic review of the intervention research in that area. Refer to the APA manual for how to format headings and citations appropriately. Students will also provide a short update in class.

### This assignment will be graded as pass/fail.

#### Final Paper (50 points)

#### (Performance Based Assessment)

Students will conduct a systematic review on a topic of their choice and write up findings in manuscript form. The manuscript will contain (a) introduction, (b) methods, (c) results (including a literature table), (d) discussion, and (e) references. Refer to the APA manual for how to format headings and citations appropriately. The purpose of this assignment is to demonstrate your ability to complete a comprehensive systematic review. As such, it will be very difficult to produce an adequate paper with fewer than 10 studies that meet your specified criteria. Strategies for widening search procedures and inclusion criteria will be presented to assist you in meeting this minimum threshold.

#### Introduction

- o Brief introduction to the topic & literature review.
- o Statement of purpose and research questions.

#### **Methods**

- o Search Procedures
- o Inclusion/Exclusion Criteria
- o Coding Conventions & Procedures

#### Results

- o Overview of studies located through systematic search
- Overall findings organized in a meaningful way for the reader
- o A literature table of reviewed studies that highlights important study characteristics and outcomes.

#### Discussion

- o Summary of important results, discussion of how findings add to existing literature base, and implications for the future research and practice
- o Discussion points should connect to findings in the analysis

#### References

- o References should be listed in APA format.
- o Studies included in the review should be noted with an asterisk.

## Rubric for Final Paper

## Exemplary paper (A):

Effective syntheses 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 or meta-analysis). 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 literature 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).

#### Adequate paper (B):

Good overall paper, lacking in one or two of the criteria for an exemplary paper. Not entirely reflective or thoughtful, or minor writing style or APA format errors may be present.

**Inadequate paper (C):** Overall, acceptable but with multiple significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style or APA format, or unclear or inappropriate description of implementation of project. May have substantial problems in important areas such as writing, proposed implementation of intervention, procedures for evaluation of results, or overall thoughtfulness.

**Unacceptable/no paper (0 points):** Paper with no value whatsoever relative to the assignment, or no paper turned in at all. May describe a project of no value that was not approved for this assignment.

#### **Final Presentation**

Students will present their research findings in a conference 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 class Blackboard site.
- Prepare a one-page summary hand-out for your audience and the instructor.

## Rubric for Final Presentation

## **Exemplary presentation (10pts)**

• Effective presentation with both visual display and oral communication that conveys accurate content and is professional and articulate.

## **Marginal presentation (5 points)**

• Overall, acceptable but with multiple significant problems. Contains some useful information, but may have substantial problems in accuracy of content, effectiveness of visual display, and/or professionalism of visual or oral presentation.

#### No presentation (0 points)

## Other Assignments.

Not applicable.

#### Schedule

Tentative Class Schedule:

Class	Topic	Readings	Due
8/30	• Course Overview		
	• Review—Types of Research		
9/6	<ul> <li>Overview of Intervention         Research in Special Education</li> <li>Introduction to Systematic         Synthesis of Research         <ul> <li>Step 1: Formulating the</li></ul></li></ul>	<ul> <li>Mastropieri et al. (2009)</li> <li>Forness et al. (2001)</li> <li>Lipsey &amp; Wilson (2001): Chapter 1</li> </ul>	
	Literature		

Class	Topic	Readings	Due
9/13	Library Orientation	Reduings	Buc
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9/20	<ul> <li>Scientific Methods &amp; evidence-based practices</li> <li>Step 3: Gathering Information from Studies</li> </ul>	<ul> <li>Odom et al. (2005)</li> <li>Lipsey &amp; Wilson (2001): Chapters 2</li> </ul>	• SYNTHESIS INTRODUCTION (with rationale & research questions)
9/27	<ul><li> Group Research in Special Education</li><li> Reliability &amp; Validity</li></ul>		• HW 1: Inclusion/ exclusion criteria (draft)+5 articles
10/4	• Single Subject Research in Special Education		• HW 2: Inclusion/ exclusion criteria (revised)+5 articles
10/11	NO CLASS		
10/18	<ul> <li>Developing a Coding         Scheme and Coding Study         Reports         <ul> <li><u>Step 4</u>: Evaluating the                 Quality of Studies</li> </ul> </li> <li>Data Management</li> </ul>	<ul> <li>Lipsey &amp; Wilson (2001): Chapter 4</li> <li>Lipsey &amp; Wilson (2001): Chapter 5</li> </ul>	
10/25	Quality Indicators in special Education Research	<ul><li>Gersten et al. (2005)</li><li>Horner et al. (2005)</li></ul>	• HW 3: Coding manual + 5 coded articles
11/1	Writing the Methods Section		HW 4: Coding manual (revised)
11/8	<ul> <li>Step 5: Analyzing and Integrating the Outcomes of Studies</li> <li>Step 6: Interpreting the Evidence</li> <li>Step 7: Presenting the Results</li> </ul>	<ul> <li>Kavale (2001)</li> <li>Scruggs &amp; Mastropieri (2013)</li> </ul>	
11/15	<ul> <li>Selecting, Computing, and Coding the Effect Size Statistic</li> <li>Coding Outcome Variables in Single Subject Research</li> </ul>	<ul> <li>Lipsey &amp; Wilson (2001): Chapter 3</li> <li>Parker et al. (2011)</li> </ul>	HW 5: Literature table
11/22	WRITING DAY	Recommended Readings:  • Lipsey & Wilson(2001): Chapter 6, 7, & 8  • What Works Clearinghouse (2013)	
11/29	• Dissemination of Research Findings		FINAL PAPER

Class	Topic	Readings	Due
12/6	FINAL PRESENTATIONS		
12/13	INDIVIDUAL CONFERENCES		

**NOTE:** This syllabus may change according to class needs.