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

Fall 2017
EDSE 841 001: Intervention Research in Special Education
CRN: 71457, 3 – Credits

Instructor: Dr. Sheri Berkeley	**Meeting Dates**: 08/28/17 – 12/20/17
Phone: 703-993-9689	**Meeting Day(s)**: Tuesday
E-Mail: sberkele@gmu.edu (best contact)	**Meeting Time(s)**:7:20 pm - 10:00 pm
Office Hours: by appointment	**Meeting Location**: Fairfax, KH 102
Office Location: Finley 212	**Other Phone**: n/a

*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.

Prerequisite(s) Admission to PhD in education program, or permission of instructor
Co-requisite(s) None

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. Offered by Graduate School of Education. May not be repeated for credit.

> Registration Restrictions:
> Enrollment is limited to students with a major in Education.
> Enrollment is limited to Graduate level students.
> Schedule Type: Seminar

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 teacher candidates/students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other teacher candidates/students should refer to their faculty advisor.

Course Delivery Method

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:
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.

Course Relationship 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.

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

Forness, S. R. (2001). Special education and related services: What have we learned from meta-analysis?. *Exceptionality*, *9*(4), 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, <u>you will need to login to Blackboard to upload assignments for the course</u>.

Access Blackboard through **<u>myMason</u>**:

→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 meta-analysis 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_st andards_handbook.pdf

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, hard copy).

Tk20 Performance-Based Assessment Submission Requirement

It is critical for the special education program to collect data on how our students are meeting accreditation standards. Every teacher candidate/student registered for an EDSE course with a required Performance-based Assessment (PBA) is required to upload the PBA to Tk20 (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). A PBA is a specific assignment, presentation, or project that best demonstrates one or more CEC, InTASC or other standard connected to the course. A PBA is evaluated in two ways. The first is for a grade, based on the instructor's grading rubric. The second is for program accreditation purposes. Your instructor will provide directions as to how to upload the PBA to Tk20.

For EDSE 841, the required PBA is (NO ASSESSMENT REQUIRED FOR THIS COURSE). Failure to submit the assignment to Tk20 will result in reporting the course grade as Incomplete (IN). Teacher candidates/students have until five days prior to the University-stated grade change deadline to upload the required PBA in order to change the course grade. When the PBA is uploaded, the teacher candidate/student is required to notify the instructor so that the "IN" can be changed to a grade. If the required PBA is not uploaded five days prior to the University-stated grade change deadline and, therefore, the grade not changed, it will become an F. Please check to verify your ability to upload items to Tk20 before the PBA due date.

Assignments and/or Examinations

Performance-based Assessment (Tk20 submission required)

Not applicable.

Performance-based Common Assignments (No Tk20 submission required.)

Not applicable.

Other Assignments

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
o   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.

<center>*Rubric for Final Paper*</center>

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)

Course Policies and Expectations

Attendance/Participation. 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.

Grading Scale

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

Evaluation will be based upon the following point value for each assignment:

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

*Note: The George Mason University Honor Code will be strictly enforced. Students are responsible for reading and understanding the Code. "To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work." Work submitted <u>must</u> be your own or with proper citations (see http://oai.gmu.edu/the-mason-honor-code/).

Professional Dispositions
Students are expected to exhibit professional behaviors and dispositions at all times.

Class Schedule
*<u>Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.</u>

Class	Topic	Readings	Due
8/29	• Course Overview • Review—Types of Research		

9/5	• Overview of Intervention Research in Special Education
	• Introduction to Systematic Synthesis of Research
	  ○ <u>Step 1</u>: Formulating the Problem
	  ○ <u>Step 2</u>: Searching the Literature
		• Mastropieri et al. (2009)
		• Forness et al. (2001)
		• Lipsey & Wilson (2001): Chapter 1	

9/12	• Scientific Methods & evidence-based practices ○ <u>Step 3</u>: Gathering Information from Studies	• Odom et al. (2005) • Lipsey & Wilson (2001): Chapters 2	
9/19	• Group Research in Special Education • Reliability & Validity		• SYNTHESIS INTRODUCTION (with rationale & research questions)
9/26	• Library Orientation		• HW 1: Inclusion/ exclusion criteria (draft)+5 articles
10/3	• Single Subject Research in Special Education		• HW 2: Inclusion/ exclusion criteria (revised)+5 articles
10/10	NO CLASS		
10/17	ONLINE CLASS: CITI TRAINING		

Class	Topic	Readings	Due
10/24	• Developing a Coding Scheme and Coding Study Reports o Step 4: Evaluating the Quality of Studies • Data Management	• Lipsey & Wilson (2001): Chapter 4 • Lipsey & Wilson (2001): Chapter 5	
10/31	• Quality Indicators in special Education Research	• Gersten et al. (2005) • Horner et al. (2005)	• HW 3: Coding manual + 5 coded articles
11/7	• Writing the Methods Section		• HW 4: Coding manual (revised)

11/14	• Step 5: Analyzing and Integrating the Outcomes of Studies
	  o Step 6: Interpreting the Evidence
	  o Step 7: Presenting the Results
		• Kavale (2001)
		• Scruggs & Mastropieri (2013)
			HW 5: Literature table

11/21	WRITING DAY	Recommended Readings: • Lipsey & Wilson(2001): Chapter 6, 7, & 8 • What Works Clearinghouse (2013)	
11/28	• Selecting, Computing, and Coding the Effect Size Statistic • Coding Outcome Variables in Single Subject Research	• Lipsey & Wilson (2001): Chapter 3 • Parker et al. (2011)	•
12/5	• Dissemination of Research Findings		• FINAL PAPER
12/12	FINAL PRESENTATIONS		
12/19	INDIVIDUAL CONFERENCES		

Core Values Commitment

The College of Education and 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/

GMU Policies and Resources for Students

Policies

• Students must adhere to the guidelines of the Mason Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).

- Students must follow the university policy for Responsible Use of Computing (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).

- Students are responsible for the content of university communications sent to their Mason 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 with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ods.gmu.edu/).

- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.

- The 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/).

- The 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/).) to enhance students' personal experience and academic performance (see http://caps.gmu.edu/).

- The Student Support & Advocacy Center staff helps students develop and maintain healthy lifestyles through confidential one-on-one support as well as through interactive programs and resources. Some of the topics they address are healthy relationships, stress management, nutrition, sexual assault, drug and alcohol use, and sexual health (see http://ssac.gmu.edu/). Students in need of these services may contact the office by phone at 703-993-3686. Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to http://ssac.gmu.edu/make-a-referral/.

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/.