



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

Fall 2022

EDSE 841 001: Evaluating Intervention Research

CRN: 81633, 3 – Credits

<b>Instructor:</b> Dr. Sheri Berkeley	<b>Meeting Dates:</b> 8/25/2022 – 12/15/2022
<b>Phone:</b> email is best contact	<b>Meeting Day(s):</b> Thursday
<b>E-Mail:</b> sberkele@gmu.edu	<b>Meeting Time(s):</b> 4:30 – 7:10 pm
<b>Office Hours:</b> By appointment	<b>Meeting Location:</b> Finley 114
<b>Office Location:</b> Finley 212	<b>Other Phone:</b> N/A

**Note: This syllabus may change according to class needs. Teacher Candidates/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 opportunities for in-depth study, analysis, and discussion of original intervention research in special education with students with disabilities or other at-risk populations. Emphasizes analyzing research methodology, coding original intervention research, analyzing results, synthesizing findings, formulating future research questions relevant to special populations, and gaining an understanding of the submission process for conferences and publications.

**Advising Contact Information**

Please make sure that you are being advised on a regular basis as to your status and progress in your program. Students in Special Education and Assistive Technology programs can contact the Special Education Advising Office at 703-993-3670 or [speced@gmu.edu](mailto:speced@gmu.edu) for assistance. All other students should refer to their assigned program advisor or the Mason Care Network (703-993-2470).

## **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.

## **Professional Standards**

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 Texts**

Cooper, H. (2009). *Research synthesis and meta-analysis: A step-by-step approach*. Sage.

Cosby, P. & Bates, S. (2021). *Methods in behavioral research* (14<sup>th</sup> Edition). McGraw Hill.  
ISBN13: 9781260205589

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). <https://doi.org/10.1037/0000165-000>

## **Required Resources**

### ***Campbell Collaboration Trainings***

- Calculating Effect Sizes, David Wilson  
<https://www.youtube.com/watch?v=Fggs7zOhw6c>
- Introduction to Meta-analysis, Joshua R. Polanin  
<https://www.youtube.com/watch?v=How7LW7WIFQ&t=608s>

## **Additional Readings**

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., Connors, 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.

### **Course Performance Evaluation**

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

### **VIA 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 VIA (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 VIA.

For EDSE 841, the required PBA is (NO ASSESSMENT REQUIRED FOR THIS COURSE). Please check to verify your ability to upload items to VIA before the PBA due date."

### ***Assignments and/or Examinations***

#### **Performance-based Assessment (VIA submission required)**

Not applicable for this course.

#### **College Wide Common Assessment (VIA submission required)**

Not applicable for this course.

## *Other Assignments*

### **Participation & Homework (10 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 (10):** 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 (8-9):** 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 (7):** 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 -6 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.

### **Library Tutorials (10 points)**

Students will complete a series of online library tutorials that address fundamentals of research and library resources, including: finding resources, evaluating research, citing research, creating research products, and research ethics. Students will provide a short update in class. **This assignment will be graded as pass/fail.**

### **HSRB CITI Training Module Completion (10 points)**

GMU requires a Mandatory Training for Persons Conducting Research Using Human Subjects. Seven learner modules in the Basic Course are required prior to applying to conduct any research at Mason using human subjects. For this course, you will be required to complete the Basic Course AND one additional 'optional' module related to your area of interest.

- This online training module can be accessed at <http://www.citiprogram.org>. (You must complete the required basic course before the optional modules are available).

- Specific directions for how to log on can be found at the GMU Office of Research Subject Protection website: <http://research.gmu.edu/ORSP/HumanTraining.html>

Turn in a digital copy (and keep a copy for your records).

GMU also requires that all researchers (including student researchers) submit a research application to the office of Human Subject Protections PRIOR to conducting research. For this course, you should review the application form for class discussion.

- Application forms and guidelines can be found at the GMU Office of Research Subject Protection website: <http://research.gmu.edu/ORSP/HumanFormsAndInstructions.html>

### **ONLINE CLASS: Campbell Collaboration Trainings (10 points)**

Students will complete two online trainings that address the fundamentals of meta-analysis methods. Students will provide a short update in class. **This assignment will be graded as pass/fail.**

### **Final Paper (40 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

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

#### Methods

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

#### Results

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

#### Discussion

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

#### References

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

Instructor will provide further guidance. **This assignment will be graded using the rubric at the end of this syllabus.**

### **Conference Proposal and Poster Presentation (20 points)**

Students will prepare a proposal for a conference presentation based on their course assignment. 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.

Instructor will provide further guidance.

### ***Assignment Summary***

<b>Assignments</b>	<b>Points I Earned</b>	<b>Points Possible</b>
Participation & Homework		10
Library Tutorials		10
Online Class: CITI Training		10
Online Class: Campbell Collaboration Trainings		10
Final Paper		40
Conference Proposal & Poster Presentation		20
Total Points:		100

### **Course Policies and Expectations**

#### ***Attendance/Participation***

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

#### ***Late Work***

Late work will not be accepted.

#### **Grading**

A = 90-100%

B = 80-89%

C = 70-79%

F = <79%

**\*Note:** The George Mason University Honor Code will be strictly enforced. See [Academic Integrity Site \(https://oai.gmu.edu/\)](https://oai.gmu.edu/) and [Honor Code and System \(https://catalog.gmu.edu/policies/honor-code-system/\)](https://catalog.gmu.edu/policies/honor-code-system/). 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 must be your own new, original work for this course or with proper citations.

## Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See [Policies and Procedures \(https://cehd.gmu.edu/students/policies-procedures/\)](https://cehd.gmu.edu/students/policies-procedures/).

## Class Schedule

\*Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Class	Topics	Readings DUE	Assignments DUE
8/25	Course Overview <ul style="list-style-type: none"> <li>Overview of Types of Research</li> <li>Types of Intervention Research</li> </ul>		
9/1	Library Orientation	C&B: Ch 1,2 <b>Mastropieri et al. (2009)</b>	
9/8	<ul style="list-style-type: none"> <li>Overview of Research Syntheses &amp; Meta-analyses</li> <li>Activity: Developing inclusion/exclusion criteria</li> </ul>	<b>Cooper:</b> Ch 1,2,3	<b>HW:</b> library tutorials
9/15	<b><u>INDEPENDENT ONLINE CLASS:</u></b> <ul style="list-style-type: none"> <li><i>Topic Exploration!</i></li> </ul>	C&B: Ch 4,5,6	
9/22	Group Research in Special Education <ul style="list-style-type: none"> <li>Independent Variable (intervention)</li> <li>Dependent Variable(s) (Measures)</li> <li>Research Procedures</li> </ul>	<b>C&amp;B:</b> Ch 8,9,10	<b>HW:</b> Inclusion/exclusion criteria (draft) <b>HW:</b> Post 5 intervention studies in the class Onedrive
9/29	<ul style="list-style-type: none"> <li>Quality Indicators in Group Research</li> <li>Activity: Developing a Coding Scheme &amp; Coding Study Reports</li> </ul>	Cooper: Ch 4 <b>Odem et al. (2005)</b> <b>Gersten et al. (2005)</b>	
10/6	<ul style="list-style-type: none"> <li>Data management &amp; organization (creating a literature table)</li> </ul>	<b>Cooper:</b> Ch 5	<b>HW:</b> Coding manual (draft)
10/13	<ul style="list-style-type: none"> <li>Data Analysis</li> <li>Activity: Writing a group design methods section</li> </ul>	C&B: Ch 12,13,14	
10/20	<b><u>INDEPENDENT ONLINE CLASS:</u></b> <i>Campbell Collaboration Trainings:</i> <ul style="list-style-type: none"> <li>Introduction to Meta-analysis</li> <li>Calculating Effect Sizes</li> </ul>	<b>Cooper:</b> Ch 6,7 <b>Kavale (2001)</b>	
10/27	<ul style="list-style-type: none"> <li>Selecting, Coding, and Computing the Effect Size</li> </ul>	<b>Cooper:</b> Ch 8,9	<b>HW:</b> Literature table (draft)

	Statistic • Activity: Let's do it!		
11/3	• Single Case Experimental Design (SCED) Research in Special Education • Developing a Coding Scheme & Coding Study Reports	<b>C&amp;B: Ch11 Horner et al. (2005)</b>	
11/10	• Coding Outcome Variables in Single Subject Research • Data Management	Parker et al. (2011) <b>Scruggs &amp; Mastropieri (2013)</b>	
11/17	<b>INDEPENDENT ONLINE CLASS:</b> <i>Ethics in Educational Research</i> • HSRB CITI Training Module	<b>C&amp;B: Ch 3</b>	
11/24	<b><u>NO CLASS:</u></b> <i>Happy Thanksgiving!</i>		
12/1	<b><u>SYNCHRONOUS ONLINE CLASS:</u></b> <i>Peer review</i> <b>Join Zoom Meeting</b> <b><a href="https://gmu.zoom.us/j/96229508456">https://gmu.zoom.us/j/96229508456</a></b>		<b>HW: FULL FINAL PAPER (draft)</b> <b>DUE: CITI Certificates</b>
12/8	<b>STUDENT PRESENTATIONS:</b> <i>Conference Proposal &amp; Poster Presentations</i>		<b>DUE: FULL FINAL PAPER</b> <b>DUE: Conference Proposal &amp; Poster Presentation</b>
12/15	<b><u>STUDENT CONFERENCES:</u></b> <i>Virtual Individual Conferences – Optional [by appointment]</i>		

### 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: See [Core Values](http://cehd.gmu.edu/values/) (<http://cehd.gmu.edu/values/>).

### GMU Policies and Resources for Students

#### *Policies*

- Students must adhere to the guidelines of the Mason Honor Code. See [Honor Code and System](https://catalog.gmu.edu/policies/honor-code-system/) (<https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing. See [Responsible Use of Computing](http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/) (<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 [Disability Services \(https://ds.gmu.edu/\)](https://ds.gmu.edu/).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

### ***Campus Resources***

- Support for submission of assignments to either Tk20 or VIA should be directed to <https://cehd.gmu.edu/aero/assessments/>
- Questions or concerns regarding use of Blackboard should be directed to [Blackboard Instructional Technology Support for Students \(https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/\)](https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/).

### ***Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:***

- As a faculty member, I am designated as a “non-confidential employee” and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing the [Title IX Coordinator \(titleix@gmu.edu\)](mailto:titleix@gmu.edu).
- **For information on student support resources on campus, see [Student Support Resources on Campus \(https://ctfe.gmu.edu/teaching/student-support-resources-on-campus\)](https://ctfe.gmu.edu/teaching/student-support-resources-on-campus).**
- For additional information on the College of Education and Human Development, please visit our website [College of Education and Human Development \(http://cehd.gmu.edu/\)](http://cehd.gmu.edu/).

## **Appendix**

### **Assessment Rubric(s)**

#### *Rubric for Final Paper (Performance Based Assessment)*

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.