



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

Fall 2023

EDSE 842 001: Application of Research Standards for Individuals with Disabilities

CRN: 82807, 3 – Credits

<b>Instructor:</b> Dr. Kelley Regan	<b>Meeting Dates:</b> 8/21/23 – 12/13/23
<b>Phone:</b> 571-235-6228 <a href="https://gmu.zoom.us/j/6502856469">https://gmu.zoom.us/j/6502856469</a>	<b>Meeting Day(s):</b> Thursday
<b>E-Mail:</b> kregan@gmu.edu	<b>Meeting Time(s):</b> 4:30 pm – 7:10 pm
<b>Office Hours:</b> as needed by appointment	<b>Meeting Location:</b> Fairfax; Finley 114
<b>Office Location:</b> Finley building, Rm 201B	<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 knowledge and skills in the application of research standards across different methods for conducting survey research, single-subject, experimental and correlational research, mixed methods, and qualitative research. Emphasizes application to disability-related research across different contexts.

**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. Written plans for a research study using APA format
7. Electronic supplements and activities via Blackboard

## **Learner Outcomes**

**Upon completion of this course, students will be able to:**

1. Apply research standards to critiquing published research and reviewing manuscripts submitted for publication.
2. Describe the procedures and standards of research as they apply to strengths and limitations of single-subject research methods in disability-related research.
3. Evaluate previous and design future studies that employ single-subject research methods.
4. Describe the procedures and standards of research as they apply to strengths and limitations of qualitative research methods in disability-related research.
5. Evaluate previous and design future studies that employ qualitative research methods.
6. Describe the procedures and standards of research as they apply to strengths and limitations of survey methods in disability-related research.
7. Evaluate previous and design future studies that employ survey research methods.
8. Describe the procedures and standards of research as they apply to strengths and limitations of correlational research methods in disability-related research.
9. Describe the procedures and standards of research as they apply to strengths and limitations of group-experimental research methods in disability-related research.
10. Evaluate previous and design future studies that employ group-experimental research methods.
11. Describe how disability related research intersects with access to general education curriculum and life-long learning.
12. Discuss how requirements posed by individuals with disabilities impact research in other fields.

## **Professional Standards**

Not applicable.

## **Required Texts**

There are no required texts for this course. Readings will be journal articles, web-based resources (e.g., National Technical Assistance Center on Transition), or book chapters.

## **Recommended Texts**

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

## **Required Resources**

Access to Bb. Please refer to Bb and the syllabus for assigned readings per week.

## **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/SLL (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/SLL.

For EDSE 842: No requirement to upload a Performance-based Assessment (PBA) to VIA/SLL.

## **Assignments and/or Examinations**

### **Performance-based Assessment**

**(VIA submission required)**

None

### **College Wide Common Assessment**

**(VIA submission required)**

N/A

## **Other Assignments**

### **Class Attendance/ Participation (14 points)**

1. Professional Behavior: For a satisfactory grade in the course, students are expected to attend all classes, arrive on time, be prepared for class, demonstrate professional behavior (see Professional Disposition Criteria at <http://www.gse.gmu.edu> for a listing of these dispositions), and complete all assignments with professional quality in a timely manner. To successfully complete this course, students need to adhere to the due dates for specific readings and assignments to be completed. If you feel you cannot adhere to the schedule noted in the syllabus, and if you miss more than two class sessions, please contact the Instructor immediately (within 48 hours after the second absence) to discuss options for withdrawing and completing the course during another semester.
2. Laptops, cell phones, PDAs and all other electronic devices should be silenced during class time. If you choose to use your personal laptop for note taking, I ask that you utilize it for

that purpose only (not for surfing the web, checking email, etc.). Cell phones should not only be silenced but must be out-of-reach during class sessions (e.g., not on the table; not accessible)

3. Promptness: All assignments must be submitted on or before the assigned due date. In fairness to students who make the effort to submit work on time, 5% of the total assignment points will be deducted each day from your grade for late assignments. However, no assignment will be accepted after 2 class sessions (two weeks) have passed.

4. Written Products: All written assignments must be prepared in a professional manner following guidelines stated in the Publication Manual of the American Psychological Association (7th edition). All final products must be typed. Products that, in the judgment of the instructor, are unreadable or unprofessionally prepared will be returned un-graded or assigned a lower evaluation.

**\*\*PLEASE** expect to verbally participate, effectively listen during every class session, and encourage discussion of your peers.

#### Response to QI Feedback (30 points; see Appendix for rubric)

Select a completed paper you have written that is proposing a study and inclusive of a methods section. The paper may describe any of the following methodologies: *single-subject*, *qualitative*, *group-experimental*, or *quasi-experimental* methodology. Ideally, this paper is a work in progress. The paper should be about 8-10 pages max., double –spaced, (NOT including title page and references). Ideally, the paper would include headers such as participants, setting, materials/instrument, procedures, measures, and proposed data analysis. You will provide a peer with this paper, as is, so that the peer review assignment can be completed.

Once you receive the peer’s review of your paper, you will then have an opportunity to edit your paper. You will also provide a response for each of the feedback items in a table format. Ideally, you will be explaining how and where you responded to the feedback. I will evaluate both the edits of the paper and the response to the reviewer’s feedback. The rubric for this assignment is toward the end of this syllabus. Headings and subheadings should align with APA given the research design selection.

#### Peer Review (20 points):

Each student will critique a peer’s paper that includes a methods section. The peer review should focus on how/if the author met the quality indicators for the specific methodology. The task is to provide thorough feedback for the QIs by following this process: (1) List a sequenced checklist and/or questions (based on standards) you will ask yourself when critiquing; (2) Under each item or question, provide the critique – either commending the presence of a QI or identifying what is still needed or in need of clarification; and (3) use page numbers and/or reference a header in order to clearly communicate where and how the author should focus the revision. Additional comments and suggestions can be relative to style, content, written language, and organization however, the comments and suggestions should consider the quality indicators and elements of quality research designs and/or considerations of special education research. A rubric will be provided on Bb.

Final (10 points)

The final exam will be completed in class. Responses to open-ended prompts will be typed and provided to the instructor at a designated due date (see schedule). Responses on the exam should not be discussed among peers, but course materials, resources, and readings may be used to support the responses. A rubric for the responses will be provided on our course Bb site.

Comparative Methodological Table (2 @ 10 points each = 20 points)

This table can be a matrix/graphic organizer that depicts characteristics for each of the following research methodologies: qualitative, single-subject, and survey research (Table 1) and mixed methods, group experimental, quasi-group experimental (Table 2).

The table should include the following headers for each research method (at least) as well as additional headers specific to individual research methods):

1. *Purpose* (apart from other methods; why this methodology specifically over others?);
2. *Data Sources* (identify the types of data sources typical of this methodology);
3. *Strengthen Internal Validity* by... (or for Qualitative – Trustworthiness; How do you strengthen internal validity? Procedures? Steps?);
4. *Strengthen External Validity* by...(How do you strengthen external validity? Procedures? Steps?);
5. *Establish Reliability* by...(How do you establish reliability?)
6. *Sample Research Question*
7. *What else is important to remember specific to this individual research method?*

You can feel free to add additional headers/columns to the comparative methodological tables. The ten points per table should include accuracy in those headers provided above. The tables are to be completed independently but it is expected that individuals will use class materials, resources, lectures, discussions, to support completion of this assignment. As we focus on specific methods in class, it is highly encouraged to take notes and begin to draft content for the tables ongoing. A rubric will be provided in class.

**Assignment Summary**

Attendance/participation	14 points
Peer Review	20 points
Response to Peer Review	30 points
Score for the Quality Indicator Matrix	6 points
Comparative Methodological Tables	2 @ 10 points each
Final Exam	10 points
Total Points:	100 points

### **Student Evaluations of Teaching:**

The student evaluation of teaching, or SET, is an online course survey. You are strongly encouraged to complete this form for each course as this feedback helps instructors and administrators improve your class experiences. Towards the end of the course, you will receive email and Blackboard notifications when the evaluations open. Your anonymous and confidential feedback is only shared with instructors after final grades have been submitted. More information about the SET can be found on The Institute of Effectiveness and Planning website at <https://oiep.gmu.edu/set/>

### **Course Policies and Expectations**

#### **Attendance/Participation**

Because of the importance of lecture and discussion to the total learning experience, students are encouraged to both attend and participate in class regularly. Attendance, punctuality, preparation, and active contribution to small and large group efforts are essential. Students who must miss a class must notify the instructor (preferably in advance) and are responsible for completing all assignments and readings for the next class. A guided question(s) will be provided for specific readings to encourage preparation and participation in the subsequent class session.

#### **Late Work**

All assignments must be submitted on or before the assigned due date. In fairness to students who make the effort to submit work on time, 5% of the total assignment points will be deducted each day from your grade for late assignments. Late assignments will not be accepted more than seven week/end days after the due date.

#### **Other Requirements**

Please bring a laptop to each class session so that you may access course materials efficiently.

#### **Grading**

##### **Grading Scale**

95-100% = A  
90-94% = A-  
87-89% = B+  
83-86% = B  
80-82% = B-  
70-79% = C  
<70% = F

**\*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.

Date	Course Topic	Readings Due Today	Assignment Due Today
8/24	Introductions; <b>What are the Quality Indicators for Research Methodologies used to determine Evidence-Based Practices?;</b> Why do QIs matter? <a href="https://cecdr.org/research/research-quality/quality-indicators-research-methodology-and-evidence-based-practices">https://cecdr.org/research/research-quality/quality-indicators-research-methodology-and-evidence-based-practices</a>	N/A	Note: This article will be referenced in class: Odom et al, 2005
8/31	<b>Sources for informing and organizing the Quality Indicators</b>  <b>What Works Clearinghouse</b> <a href="https://ies.ed.gov/ncee/wwc/">https://ies.ed.gov/ncee/wwc/</a>  National Technical Assistance Center on Transition (NTACT) Checklists (to be provided)	<b>Cook &amp; Cook, 2016</b> (What are the research designs in SPED Research?; What is missing? Where are the QIs relevant?)  <b>Council for Exceptional Children Standards for Evidence-Based practices in Special Education, 2014</b> (Table provides how many QIs?; where is social validity embedded?)	Identify a research proposal draft for the Peer Review assignment.  <b>Note:</b> This article will be referenced in class: Cook, B. G., Tankersley, M., & Landrum, T. J. (2009).

		What Works Clearinghouse Procedures and Standards Handbook Version 5.0	
9/7	<b>Strengths and Limitations of research methods</b> Focus: Surveys	<b>Gehlbach &amp; Brinkworth, 2011</b>  <b>Leko et al., 2023</b> (Review “strong component designs” and thereon; what parallels can you identify between ‘legitimation’ and CECs, 2014 QIs?)	Bring your fillable methodological tables with headers to class.
9/14 (no F2F meet)	<a href="https://ci3t.org/practice">https://ci3t.org/practice</a>	<b>Royer, D. J., Lane, K. L., &amp; Common, E. A. (2017).</b> The Standards overview and walk-through guide.  <b>Lane, K. L., Common, E. A., Royer, D. J., &amp; Muller, K. (2014).</b> The quality indicator matrix using Council for Exceptional Children 2014 standards.	<b>Score for the Quality Indicator Matrix is Due</b> by midnight (6 points)  *Review the walk-through guide and follow steps to develop your own Excel file.  *Review the Quality Indicator Coding Matrix Check for Understanding (items 1-32)  *Complete the Instant Scoring exercise. Take a screenshot of your score and upload to BB.
9/21	<b>Context and Setting</b> (Quality Indicator 1.0)  <b>Participants</b> (Quality Indicator 2.0)  <b>Intervention Agent</b> (Quality Indicator 3.0)	<b>Cook &amp; Cook, 2017</b> (How can application of the QIs benefit practitioners?; Why is QI 1.0 – 3.0 so important?; How does this article help with the methodological table assignment?)	Review and compare “Participants” across the NTAQT Quality Indicator Checklist for Qualitative Studies and the Quality Indicator Checklist for Single-Case and the Quality Indicator Checklist for Group Experimental



9/28	<p><b>Description of Practice</b> (Quality Indicator 4.0)</p> <p><b>Implementation Fidelity</b> (Quality Indicator 5.0)</p>	<p><b>Barnett et al., 2014</b> (What is meant by procedural fidelity? What can be done to ensure procedural fidelity of implementation? What about adherence and dosage?)</p>	
10/5	<p><b>Internal Validity</b> (Quality Indicator 6.0) and Trustworthiness</p>	<p><b>Brantlinger et al., 2005</b></p>	
10/12 (CLD; no F2F meet)	<p>This week's class session will be <i>time</i> for you to focus on the <b>Peer Review</b> assignment (Develop your reviewer template and critique the absence or presence of the QIs as well as clarity of writing)</p>		
10/19	<p><b>Single-Subject QIs for Outcomes and Data Analysis</b> (Quality Indicator 7.0 and 8.0)</p> <p>Guest: Dr. Lisa Tullo presence or absence of QIs in ABA related studies.</p>	<p><b>Tankersley et al., 2008</b> (What are some examples of target behaviors?; Which overview of designs are you most familiar or not familiar with?; Specific question(s) you have?)</p> <p><b>Horner et al., 2005</b> (How do the QIs compare to those from CEC, 2014?)</p>	<p><b>Comparative Methodological Table #1</b> <b>DUE</b></p>
10/26	<p><b>Group Exp and Quasi Experimental QIs for Outcomes and Data Analysis</b> (Quality Indicator 7.0 and 8.0)</p>	<p><b>Gersten et al., 2005</b> (How do the QIs compare to those from CEC, 2014?)</p> <p><b>Cook et al., 2008</b> (What are methods to form equivalent groups besides randomization?; Compare quasi-exper with true experimental studies.)</p>	
11/2 (TED)	<p><b>Independent Work Session and 1:1 with instructor check-in</b></p>		

<b>11/9</b>	<b>Outcome Measures/Dependent Variable</b> (Quality Indicator 7.0)  Guest lecture: Evidence of Validity for Measures	<b>Thompson et al., 2005</b> (How do the QIs address correlational research methods?; What are common mistakes researchers should not do?)  <b>Reading TBD</b>	<b>Peer Review Due</b>
<b>11/16</b>	Course Synthesis and <b>Exam Review</b>		<b>Comparative Methodological Table #2</b> Due by midnight
<b>11/23</b>	<b>Thanksgiving Break</b>		
<b>11/30</b>	<b>Final Exam</b> Course evals reminder		<b>Response to Peer Review</b> Due by midnight

### 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 VIA should be directed to [viahelp@gmu.edu](mailto:viahelp@gmu.edu) or <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/>).
- [Learning Services \(learningservices@gmu.edu\)](mailto:learningservices@gmu.edu) - Provides a variety of experience-based learning opportunities through which students explore a wide range of academic concerns. Services include support to students with learning differences, individual study strategy coaching, individualized programs of study, and referrals to tutoring resources. Presentations on a variety of academic topics such as time management, reading, and note taking are available to the university community. The programs are open to all George Mason University students free of charge.

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

As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, 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 the [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 or support measures from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing [titleix@gmu.edu](mailto:titleix@gmu.edu).

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

#### Response to Peer Review assignment (30 points total)

#### Exemplary Response

An edited research proposal paper uses track changes or highlights the updated text and the peer review feedback is summarized in a t-chart table format with a clear response to each suggestion or comment. In this table, specific page numbers are referenced to indicate where the concern was addressed. All reviewer feedback items were addressed, considered, or clarified. The quality indicators are aligned with the CEC standards or another set of QI descriptors selected by the reviewer. A thorough description of participants, data sources, and procedures is provided. An adequate design and proposed analysis are also included. The paper follows a good writing style, free of mechanical or stylistic errors; appropriate and correct use of APA format.

### **Adequate Response**

Good overall revision of the proposal paper, however lacking in one or two of the criteria for an exemplary paper (e.g., page numbers are not referenced; a suggestion from peer review is not addressed); addresses some quality indicators, but neglects others or misinterprets the quality indicator(s); A response or two to the peer reviewer or one or two edits/additions may lack clarity or thoroughness; APA format errors may be present.

### **Marginal Response**

Overall, acceptable, but three or more suggested edits within the paper are incomplete and the response to the peer reviewer's feedback table is absent of several items which needed to be addressed; Responses to feedback are vague and/or the quality indicator(s) appear to be misunderstood; At least three items included in the peer's feedback have been neglected or not included in the response to reviewer's feedback table; Substantial problems with writing style/APA format.

### **Inadequate Response**

Less than half of the reviewer's feedback has been addressed and/or the proposal paper includes minimal revisions; paper does not use APA format

### **Unacceptable/no Response**

Paper with no value whatsoever relative to the assignment, or no paper turned in at all.

### **Readings\***

\*Any changes to this listing will be announced during the semester.

Barnett, D., Hawkins, R., McCoy, D., Wahl, E., Shier, A., Denune, H., & Kimener, L. (2014). Methods used to document procedural fidelity in school-based intervention research. *Journal of Behavioral Education*, 23, 89-107. <https://doi.org/10.1007/s10864-013-9188-y>

Brantlinger, E., Jiminez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children*, 71, 195-207. <https://doi.org/10.1177/001440290507100205>

Cook, B. G. & Cook, L. (2017). Do research findings apply to my students? Examining study samples and sampling. *Learning Disabilities Research & Practice*, 32(2), 78-84. <https://doi.org/10.1111/ldrp.12132>

Cook, B. G. & Cook, L. (2016). Research designs and special education research: Different designs address different questions. *Learning Disabilities Research and Practice*, 31(4), 190-198. <https://doi.org.10.1111/ldrp.12110>

- Cook, L., Cook, B. G., Landrum, T. J., & Tankersley, M. (2008). Examining the role of group experimental research in establishing evidence-based practices. *Intervention in School and Clinic, 44*, 76-82. <https://doi.org/10.1177/1053451208324504>
- Cook, B. G., Tankersley, M., & Landrum, T. J. (2009). Determining evidence-based practices in special education. *Exceptional Children, 75*, 365-384.
- Gehlbach, H. & Brinkworth, M. E. (2011). Measure twice, cut down error: A process for enhancing the validity of survey scales. *Review of General Psychology, 15*(4), 380-387. <https://doi.org/10.1037/a0025704>
- Gersten, R., Fuchs, L. S., 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. <https://doi.org/10.1177/001440290507100202>
- Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children, 71*, 165-179. <https://doi.org/10.1177/001440290507100203>
- Leko, M. M, Hitchcock, J. H., Love, H. R., Houchins, D. E., & Conroy, M. A. (2023). Quality Indicators for mixed-methods research in special education. *Exceptional Children, 89*(4), 432-448. <https://doi.org/10.1177/00144029221141031>
- Tankersley, M., Harjusola-Webb, S., & Landrum, T. J. (2008). Using single-subject research to establish the evidence base of special education. *Intervention in School and Clinic, 44*, 83 – 90. <https://doi.org/10.1177/1053451208321600>