



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

Spring 2024
EDSE 590 002: Research in Special Education
CRN: 15102; 3 – Credits

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|-------------------------------------|--|
| Instructor: Carolyn Iguchi | Meeting Dates: 3/11/24 – 5/5/2024 |
| Phone: 703-628-3187 | Meeting Day(s): Online |
| E-Mail: chollan2@gmu.edu | Meeting Time(s): NA |
| Office Hours: By appointment | Meeting Location: NA |
| Office Location: NA | Other Phone: NA |

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): None

Co-requisite(s): None

Course Description

Describes fundamental concepts and practices in educational research in special education. Covers specific applications of educational research methods to problems in special education. Emphasizes review and critique of special education research, and applied classroom research for teachers.

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 Student Services at 1-844-306-1785, mason@support.edu.help for assistance. All other teacher candidates/students should refer to their faculty advisor.

Advising Tip

Are you ready to apply for graduation? Students completing their program can apply for graduation on Patriotweb. If you are graduating from a Masters and certificate, be sure to apply to graduate from each program. Visit <http://registrar.gmu.edu/students/graduation/> for more information.

Course Delivery Method

Learning activities include the following:

1. Class lecture and discussion
2. Application activities
3. Peer feedback
4. Small group activities and assignments
5. Video and other media supports
6. Research and presentation activities
7. Electronic supplements and activities via Blackboard

This course will be delivered online (76% or more) using asynchronous format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and Patriot Pass password. The course site will be available in accordance with the posted start date.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see: [Browser support \(https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers\)](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers)

To get a list of supported operation systems on different devices see: [Tested devices and operating systems \(https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems\)](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems)

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a headset microphone for use with the Blackboard Collaborate web conferencing tool for small group collaborate sessions.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:

- [Adobe Acrobat Reader \(https://get.adobe.com/reader/\)](https://get.adobe.com/reader/)
- [Windows Media Player \(https://support.microsoft.com/en-us/help/14209/get-windows-media-player\)](https://support.microsoft.com/en-us/help/14209/get-windows-media-player)
- [Apple Quick Time Player \(www.apple.com/quicktime/download/\)](http://www.apple.com/quicktime/download/)
- Technical Support 24/7
 - chat: <https://support.edu.help>
 - call: 1-844-306-1785
 - e-mail: Mason@support.edu.help

Expectations

- Course Week:
Because asynchronous courses do not have a “fixed” meeting day, our week will start on Tuesdays at 12:01 a.m., and finish on Mondays at 11:55 p.m. in accordance with the Course Schedule.
- Log-in Frequency:
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 2 times per week.
- Participation:
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload:
Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support:
Students may schedule a one-on-one meeting to discuss course requirements, content, or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

- Accommodations:

Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Services.

Learner Outcomes

Upon completion of this course, teacher candidates/students will be able to:

1. Identify and understand different methods of educational research suitable for different research purposes in special education.
2. Describe and discuss basic theories and methods of quantitative experimental and quasi-experimental research in special education.
3. Describe and discuss basic theories and methods of survey research in special education.
4. Describe and discuss basic theories and methods of single subject research in special education.
5. Describe and discuss basic theories and methods of qualitative research in special education.
6. Critically evaluate education research and describe implications for educational practice.

Course Relationship to Program Goals and Professional Organizations

(Council for Exceptional Children [CEC] and the Interstate Teacher Assessment and Support Consortium [InTASC]). Upon completion of this course, students will have met the following professional standards: CEC Standard 5: Instructional planning and strategies (InTASC 7,8) & CEC Standard 6: Professional learning and ethical practice (InTASC 9).

Required Textbooks

McMillan, J. H. (2022). *Fundamentals of educational research* (8th Edition). Boston, MA: Pearson Education Inc.

Note: You only need the basic textbook without the online text access or any other add-ons.

Recommended Textbooks

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

Additional Readings

Additional readings relevant to the special education research will be provided by the instructor.

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 590, 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)

None

College Wide Common Assessment (VIA submission required)

None

Performance-based Common Assignments (No VIA submission required)

Research Proposal

During the course of the semester, students will design a research proposal for a hypothetical quantitative or qualitative study in their area of interest. It will include: the introduction with a brief review of literature and rationale for the study; clearly identified purpose statement and research questions; detailed research methods of their choice (specific research design, appropriate participants and setting, variables/data sources, instrumentation/materials, data collection procedures, ways to ensure reliability and validity or trustworthiness of a study), detailed proposed data analysis, potential implications for practice, and a formatted reference list. This assignment is the research **PROPOSAL ONLY, NOT** to include the actual research implementation.

Specific step-by-step directions will be provided by the instructor. This signature assignment for the course will be evaluated using the attached rubric.

Other Assignments

CITI Training Module Completion

GMU Mandatory Training for Persons Conducting Research Using Human Subjects is accessed at <http://www.citiprogram.org>. All required module in the Social-Behavioral-Educational (SBE) Basic course as well as the supplemental module on Research with Children are required.

Weekly Module Assignments, Discussions, and Self-Check Quizzes

Students will participate in weekly module assignments, discussions, and self-check quizzes in order to practice literature searches, reviews, and relevant research applications. This work is designed to help students prepare for their Research Critique and Research Proposal assignments one step at a time. Detailed descriptions and step-by-step instructions for each module activities will be provided by the instructor and posted in the corresponding Learning Module.

Research Critique

Students will summarize and critique an empirical research article published in a peer-reviewed journal. A list of articles will be provided by the instructor. The critique will focus on: the research problem significance, review of relevant literature, research purpose/questions, research design, participants and setting, variables/data sources, instrumentation/materials, data collection procedures, issues with reliability and validity of the study, data analysis, results, implications for practice, and overall review. Students will be expected to apply research terminology learned in the course of study, critical thinking skills, as well as personal reflections. This assignment may be completed individually or in pairs.

Specific directions and a rubric for this assignment will be provided by the instructor.

Peer Feedback

Students will provide peer feedback twice during the semester: Initial Peer Feedback in Module 4 and Final Peer Feedback in Module 7. Peer feedback plays a pivotal role in research. It is defined as a process of validating someone's research or ideas by others who are experts in the same field. Students will be asked to provide suggestions on how to improve the quality of each other's drafts before the final research paper is due.

Suggestions for meaningful and constructive peer feedback as well as a rubric will be provided by the instructor.

Course Policies and Expectations

Attendance/Participation

This class does not require any face-to-face or synchronous meetings. However, students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and providing peer feedback. In addition, optional Office Hours will be offered via Blackboard Collaborate Ultra.

Late Work

All activities must be submitted via Blackboard *on or before* the due date. **In fairness to students who make the effort to submit work on time, 10% of the total score will be deducted for each day that an assignment is late. Assignments will NOT be accepted more than 3 days late.** To recognize circumstances beyond reasonable control, students may have one-week extension for ONE assignment ONE time a semester only. This extension can NOT be applied to assignments submitted in Modules 7 and 8. The maximum extension is seven days, after which the assignment will not be graded. Students must notify the instructor if/when they wish to exercise this one-time option. *Note:* Allow additional time for as well as plan for additional participation during activities that require constructive feedback.

Grading Scale

| Requirements | Points | Percent |
|------------------------|------------|-------------|
| CITI Training (1) | 10 | 4% |
| Weekly discussions (6) | 60 | 23% |
| Weekly assignments (6) | 60 | 23% |
| Weekly quizzes (7) | 14 | 5% |
| Peer feedback (2) | 30 | 12% |
| Research Critique (1) | 30 | 12% |
| Research Proposal (1) | 56 | 21% |
| Total | 260 | 100% |

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 70-79% = C
- < 69% = F

***Note:** The George Mason University Honor Code will be strictly enforced (see <https://oai.gmu.edu/> and <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 with proper citations.

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/>

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See <https://cehd.gmu.edu/students/policies-procedures/>.

Class Schedule

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

| Learning Module | Topic | Textbook Readings*, Weekly Activities & Assignments Due |
|--------------------------|---|---|
| Learning Module 1 | Introduction to Research Methods in Special Education | McMillan (2022) - Chapter 1 (pp. 5-9; 18-33) <ul style="list-style-type: none"> ○ Why Research? ○ Sources of Knowledge ○ Research Paradigms ○ Types of Educational Research ○ Research Article Organization ○ Anatomy of a Research Article Chapter 4 (pp. 92-104) <ul style="list-style-type: none"> ○ Why Review Related Literature? OPTIONAL: Chapter 2 Learning Module 1 Activities |
| Learning Module 2 | Empirical Article Anatomy | McMillan (2022) – Chapter 3 (pp. 58-76) <ul style="list-style-type: none"> ○ Research Problems ○ Quantitative Research Problem Statements, Research Questions, and Research Hypotheses ○ Qualitative Research Problem Statements and Questions Chapter 4 (pp. 110-126) <ul style="list-style-type: none"> ○ Read, Analyze, and Summarize Key Sources ○ Writing a Review of Literature Chapter 5 (pp. 131-145) <ul style="list-style-type: none"> ○ What are Participants and Samples? ○ Random Sampling ○ Nonrandom Sampling OPTIONAL: Furey (2020) Learning Module 2 Activities |

| Learning Module | Topic | Textbook Readings*, Weekly Activities & Assignments Due |
|--------------------------|---|--|
| | | |
| Learning Module 3 | Experimental Research Designs: Single-Case/Subject Research | McMillan (2022) - Chapter 6 and Chapter 9 (pp. 281-293) <ul style="list-style-type: none"> ○ Single-Subject Designs OPTIONAL: Ledford et al., 2020 Learning Module 3 Activities |
| Learning Module 4 | Qualitative Research Designs | McMillan (2022) – Chapter 11 (pp. 338-361) <ul style="list-style-type: none"> ○ Six Approaches to Qualitative Research ○ Anatomy of a Qualitative Research Article Chapter 12 (pp. 364-378) <ul style="list-style-type: none"> ○ Introduction to Collecting Qualitative Data ○ Observation ○ Interviewing Chapter 13 (388-400) <ul style="list-style-type: none"> ○ Data Analysis and Interpretation ○ Validity/Trustworthiness OPTIONAL: Francis et al., 2022 Learning Module 4 Activities |
| Learning Module 5 | Non-Experimental Research Designs | McMillan (2022) – Chapter 7 (pp. 185-204) <ul style="list-style-type: none"> ○ First Things First: Is the Measure Sufficiently Sensitive? ○ Tests ○ Questionnaires Chapter 8 OPTIONAL: Hurwitz et al., 2022 Learning Module 5 Activities |
| Learning Module 6 | Experimental Research Designs: Group Research | McMillan (2022) – Chapter 9 (pp. 255-281) <ul style="list-style-type: none"> ○ Characteristics and Goals of Experimental Research ○ Experimental Validity ○ Types of “Group” Experimental Designs Chapter 10 OPTIONAL: Duncan et al., 2021 Learning Module 6 Activities |

| Learning Module | Topic | Textbook Readings*, Weekly Activities & Assignments Due |
|--------------------------|--|---|
| Learning Module 7 | Mixed Methods Research / Action Research | McMillan (2022) - Chapter 14 and Chapter 15 One of the articles for the Research Critique Learning Module 7 Activities Research Critique Due |
| Learning Module 8 | Research Consumer | McMillan (2022) - Chapter 16 Sample Paper in APA Formatting Learning Module 8 Activities Research Proposal Due |

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 [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 [Assessment support \(https://cehd.gmu.edu/aero/assessments/\)](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, 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.

- 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): Research Proposal

| | Exceeds Expectations | Competent | Below Expectations |
|---|---|--|---|
| Abstract | <p>1 pts</p> <p>Concise but thorough abstract providing the overview of the study</p> | <p>0.5 pts</p> <p>Adequate abstract providing the overview of the study</p> | <p>0 pts</p> <p>Inadequate or missing abstract</p> |
| Introduction & Literature Review | <p>8-10 pts</p> <p>Appropriately, significantly, and clearly described research problem; Explicit statement about how existing research (at least 5-7 empirical, primary studies) with its limitations justifies the proposed study</p> | <p>6-7 pts</p> <p>Adequately described research problem; Somewhat explicit statement about how existing research (no fewer than 5 empirical, primary studies) with its limitations justifies the proposed study</p> | <p>0-5 pts</p> <p>Not adequately described research problem; Missing a statement about how existing research justifies the proposed study; Fewer than 5 empirical, research studies reviewed</p> |
| Research Purpose & Questions | <p>5 pts</p> <p>Appropriately and clearly described research purpose and research questions that address the research problem</p> | <p>3-4 pts</p> <p>Adequately described research purpose and research questions that address the research problem</p> | <p>0-2 pts</p> <p>Inadequately described research purpose and research questions that do not fit research problem</p> |
| Method | <p>22-25 pts</p> <p>Appropriate and clearly described method for the proposed study</p> <ul style="list-style-type: none"> • appropriate research design described in detail that fits the research questions (4pts) • appropriate participants, selection method, as well as setting described in detail (4pts) • appropriate variables/target behaviors/measures/data sources/ clearly described including operational definitions (4 pts) • instruments/materials clearly described including some examples (4 pts) | <p>18-21 pts</p> <p>Adequately described method for the proposed study with almost all the sections listed under Exceeds Expectations accurately presented, but some descriptions missing sufficient details</p> | <p>0-17 pts</p> <p>Inadequately described method for the proposed study with several sections listed under Exceeds Expectations missing or presented inaccurately</p> |

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|--|---|--|--|
| | <ul style="list-style-type: none"> • step-by-step data collection procedures described in great detail allowing for replication (4 pts) • appropriate validity/reliability/trustworthiness issues described in sufficient detail (5pts) | | |
| Data Analysis | <p>5 pts</p> <p>Appropriate and clearly described data analysis that fits the research design</p> | <p>3-4 pts</p> <p>Appropriate data analysis that fits the research design but not described in sufficient detail</p> | <p>0-2 pts</p> <p>Inadequately described or inappropriate data analysis that does not fit the research design</p> |
| Potential Implications for Practice | <p>5 pts</p> <p>Appropriate and thoughtful practical implications that fit the rest of the proposed study</p> | <p>3-4 pts</p> <p>Appropriate but limited practical implications that fit the rest of the proposed study</p> | <p>0-2 pts</p> <p>Inadequate practical implications that do not fit the rest of the proposed study</p> |
| Writing & Style | <p>5 pts</p> <p>Overall clear, good writing in APA 7.0 style, free of mechanical errors; List of references in APA format; In-text citations and headings in APA format</p> | <p>3-4 pts</p> <p>Overall adequate writing in APA 7.0 style, free of mechanical errors; List of reference but APA format not completely correct; In-text citations and headings in APA format</p> | <p>0-2 pts</p> <p>Sloppy writing, has errors and not formatted in APA 7.0 style; References, in-text citations, and headings missing and/or not in APA format</p> |
| Total Points | 56 points | | |