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

**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.

**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 email 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: https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers

To get a list of supported operation systems on different devices see: 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 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/
Expectations

- **Course Week:**
  Because asynchronous courses do not have a “fixed” meeting day, our week will start on Monday at 11:59pm and finish on Monday 11:59pm EST.

- **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 3 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**

This course is part of the George Mason University, Graduate School of Education (GSE), Masters in Special Education Program. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization, as well as those established by the Interstate Teacher Assessment and Support consortium (InTASC). The standards addressed in this class include CEC Standard 5: Instructional planning and strategies (InTASC 7,8) & CEC Standard 6: Professional learning and ethical practice (InTASC 9).

**Required Textbooks**


**Recommended Textbooks**


**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, Tk20, 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 590, the required PBA is (NO ASSESSMENT REQUIRED FOR THIS COURSE). 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)
None

College Wide Common Assessment (TK20 submission required)
None

Performance-based Common Assignments (No Tk20 submission required)

Research Review Paper
As the final assignment, students will complete a traditional research review paper of a selected intervention area of their choice. The topic must be approved by the instructor. Students will need to collect a minimum of 8-10 original intervention research studies on a particular topic to include in their review. In the final research review paper, students will demonstrate a thorough understanding of current knowledge in the area of interest. An electronic copy of the final research review synthesizing the literature collected and incorporating instructor’s and peer feedback should be submitted no later than midnight on the due date.

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

Human Subjects 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 Mini-Research Application project and final Research Review Paper 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.
Mini-Research Application Project
The mini-research application project is designed to provide experience in designing, implementing, and evaluating a research study in special education. Student will design a hypothetical quantitative experimental (group or single-subject) or qualitative study (you will NOT need to implement it) in order to evaluate the effectiveness of an intervention, trying new ideas and methods, or exploring best practices. All activities for this assignment will be completed individually or in research teams.

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

Peer Feedback
Students will provide peer feedback weekly throughout the semester. 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.

Rubrics guiding peer feedback 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, points will be deducted from your grade for late assignments. Assignments will not be accepted more than 3 days late unless prior arrangements with the instructor have been made. Allow additional time for as well as plan for additional participation during activities that require constructive feedback.

Grading Scale

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Points</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly discussions</td>
<td>80</td>
<td>27%</td>
</tr>
<tr>
<td>Weekly assignments</td>
<td>60</td>
<td>20%</td>
</tr>
<tr>
<td>Weekly quizzes</td>
<td>14</td>
<td>5%</td>
</tr>
<tr>
<td>End-of-semester survey</td>
<td>6</td>
<td>2%</td>
</tr>
<tr>
<td>Peer feedback</td>
<td>40</td>
<td>13%</td>
</tr>
<tr>
<td>Mini-Research Application Project</td>
<td>40</td>
<td>13%</td>
</tr>
<tr>
<td>Research Review Paper</td>
<td>60</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
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. 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 or with proper citations (see https://catalog.gmu.edu/policies/honor-code-system/).

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.

<table>
<thead>
<tr>
<th>Learning Module</th>
<th>Topic</th>
<th>Textbook Readings*, Weekly Activities &amp; Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Module 1</td>
<td>Introduction to Research Methods in Special Education</td>
<td>McMillan (2016) - Chapter 1; Chapter 2, Chapter 4 (pp. 75 – 89)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OPTIONAL: Schlosser et al., 2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning Module 1 Activities</td>
</tr>
<tr>
<td>Learning Module 2</td>
<td>Empirical Article Anatomy</td>
<td>McMillan (2016) - Chapter 3 (pp. 46-59 and 69-74); Chapter 5 (pp. 110-132); Chapter 6 (pp. 139-154)</td>
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<tr>
<td></td>
<td></td>
<td>When Myth Trump Science</td>
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<tr>
<td></td>
<td></td>
<td>Learning Module 2 Activities</td>
</tr>
<tr>
<td>Learning Module 3</td>
<td>Experimental Research Designs: Single-Case/Subject Research</td>
<td>McMillan (2016) - Chapter 7 (171-180); Chapter 9 (263-276)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OPTIONAL: Finke et al., 2017</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning Module 3 Activities</td>
</tr>
<tr>
<td>Learning Module</td>
<td>Topic</td>
<td>Textbook Readings*, Weekly Activities &amp; Assignments Due</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
<td>-----------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Learning Module 4 | Qualitative Research Designs | McMillan (2016) - Chapter 11; Chapter 12  
OPTIONAL: Stewart et al., 2017  
**Learning Module 4 Activities** |
| Learning Module 5 | Experimental Research Designs: Group Research | McMillan (2016) - Chapter 9 (237-262); Chapter 10  
OPTIONAL: Schreibman & Stahmer, 2014  
**Learning Module 5 Activities** |
| Learning Module 6 | Non-Experimental Research Designs | McMillan (2016) - Chapter 7 (181-190); Chapter 8 (pp. 202-215 and 223-235)  
OPTIONAL: Brown, 2017  
**Learning Module 6 Activities**  
**Mini-Research Application Project Due** |
| Learning Module 7 | Mixed Methods Research / Action Research | McMillan (2016) - Chapter 13; Chapter 14  
OPTIONAL: Lewis, 2017  
**Learning Module 7 Activities** |
| Learning Module 8 | Research Consumer | McMillan (2016) - Chapter 15  
Sample Paper in APA Formatting  
**Learning Module 8 Activities**  
**Research Review Paper 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/](http://cehd.gmu.edu/values/)

**GMU Policies and Resources for Students**

**Policies**

- Students must adhere to the guidelines of the Mason Honor Code (see [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 [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 http://ods.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 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/.

- For information on student support resources on campus, see 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 https://cehd.gmu.edu/students/.
Appendix

**Assessment Rubric(s): Research Review Paper**

<table>
<thead>
<tr>
<th>Points Possible</th>
<th>Points Received</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concise but thorough abstract providing the overview of the study and major findings</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Appropriate, important, clearly described and justified research topic/problem (introduction)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Appropriate, clearly described research purpose and/or research questions (a systematic literature review in order to ...) that fit the research problem</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Appropriate and clearly described methods and procedures for the systematic literature review</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>• Searched educational databases (at least 2!)</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>• Identified and used key terms for searching the databases</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>• Clearly described ancestry (which articles were used for ancestry search); descendant (which articles/authors were used for descendant search using which databases); and hand searches (what relevant journals were used for hand search of their tables of content)</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>• Clear and reasonable inclusion AND exclusion criteria for including the studies into a review</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>Appropriate and clearly described results section</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>• at least 8-10 original/primary, empirical, intervention research studies included</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>• studies meet the inclusion/exclusion criteria</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>• clear overview of overall characteristics of the data set</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>• Succinct and sufficient description of relevant information from each individual study</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>• Visual representation of findings via a summary table</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>Thoughtful and analytical discussion of findings</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>• Discussion based on the findings from the reviewed studies</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>• Included implications for practice</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>List of references in APA format</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Overall clear, good writing in APA style, free of mechanical errors</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td></td>
</tr>
</tbody>
</table>
Exemplary paper (60-55 points): Appropriate topic, thorough and thoughtful review of previous research. Good writing style, free of mechanical or stylistic errors, appropriate use of APA format.

Adequate paper (45-54 points): Good overall paper, lacking in one or two of the criteria for an exemplary paper. Not entirely reflective or thoughtful, or minor writing style errors may be present.

Marginal paper (35-44 points): Overall, acceptable but with one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style, or review of relevant literature.

Inadequate paper (1-34 points): Paper with substantial problems in important areas such as writing, evaluation of research, overall thoughtfulness. Contains little or no information of value to special education practice.

Unacceptable/no paper (0 points): No paper turned in or paper was not approved for this assignment.