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.

Prerequisite(s): None

Co-requisite(s): None

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 students should contact the Special Education Advising Office at (703)993-3145 for assistance. All other students should refer to their faculty advisor.

Nature of Course Delivery
[Instructors, please revise in accordance with your specific course format]
Learning activities include the following:
1. Class lecture and discussion
2. Application activities
Learner Outcomes
Upon completion of this course, students will be able to:
• Identify and understand different methods of educational research suitable for different research purposes in special education.
• Describe and discuss basic theories and methods of quantitative experimental and quasi-experimental research in special education.
• Describe and discuss basic theories and methods of survey research in special education.
• Describe and discuss basic theories and methods of single subject research in special education.
• Describe and discuss basic theories and methods of qualitative research in special education.
• Critically evaluate education research and describe implications for educational practice.

Required Textbooks

Recommended Textbooks

Required Resources
n/a

Additional Readings
Other readings, including research studies, will be assigned by the instructor and posted on Blackboard.

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. The CEC Standards are listed on the following website: http://www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandar
The CEC standards that will be addressed in this class include Standard 4: Instructional Strategies and Standard 9: Professional and Ethical Practice.

GMU POLICIES AND RESOURCES FOR STUDENTS:

a. Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/honor-code/].

b. Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/].

c. Students are responsible for the content of university communications sent to their George Mason University 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.

d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students’ personal experience and academic performance [See http://caps.gmu.edu/].

e. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See http://ods.gmu.edu/].

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

g. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See http://writingcenter.gmu.edu/].

PROFESSIONAL DISPOSITIONS

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

CORE VALUES COMMITMENT

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See http://cehd.gmu.edu/values/]

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/].
Course Policies & Expectations

Attendance.

**Attendance:** students are expected to (a) attend all classes during the course (b) be actively involved in online activities (c) arrive on time and stay for the duration of class time. Lack of attendance and professional participation at all sessions (online and in class) with significantly diminish the impact of the course and interfere with creating a collaborative learning community. As such, absences from any portion of the course are strongly discouraged. Lack of participation by a student for any two weeks will result in a recommendation that the student drop the course(s). Please notify me in advance by phone or email if you will not be able to attend class.

Withdraw: If you are unable to meet the participation requirements of the course(s) it is strongly recommended that you drop the course. Withdrawing from the course is not an automatic process. You must inform the instructor in writing if you wish to withdraw from the course. Failure to notify the instructor will result in an “F” on your official George Mason University transcript.

Late Work.

**Workload:** In-depth reading, study, and work on course requirements require outside class time. Students are expected to allot class study and preparation time weekly in addition to time spent on papers and assignments. The result of late work will be the loss of 10 points per day until the assignment is received by the instructor. Individual situations will be addressed with students outside of class.

TaskStream Submission

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, (NO ASSESSMENT REQUIRED FOR THIS COURSE) (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in TaskStream. Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete(IN). Unless the IN grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

Other Course Expectations.

**Written and Oral Language:** APA Style is the standard format for any written work in the College of Education. If you are unfamiliar with APA, it would benefit you to purchase the Publication Manual of the American Psychological Association (6th ed.) You are required to use APA guidelines for all course assignments. This website links to APA format guidelines: [http://apastyle.apa.org](http://apastyle.apa.org)
**SUPPORT SESSIONS** will be provided periodically during this EDSE 590 course. If you are struggling on course assignments or would like extra support/work time with the instructor please take advantage of the extra work sessions. Dates will be provided once the course is underway. **These are voluntary help sessions.**

**Academic Integrity:** Students in this course are expected to exhibit academic integrity at all times. Be aware that plagiarism is presenting someone else's work as your own. Whether the act is deliberate or unintentional is irrelevant. You must take great care to give credit to an author when you borrow either exact words or ideas. Generally, if you use 4 or more words in a row you should use quotation marks and a proper APA citation. Remember that plagiarism is a very serious offense and can result in dismissal from the University. **Evidence of plagiarism or any other form of cheating in the class will result in a zero on that assignment and a report of the incident to the Dean’s Office.**

**Grading Scale**

- A = 95-100%
- A- = 90-94%
- B = 80-89%
- C = 70-79%
- F = <70%

**Assignments**

**NCATE/TaskStream Assignments.**

100 points: Research Paper: Completion of 1 of 2 options:

- **Option 1:** Written research application project (*action research* with a class or other type of application study)
- **Option 2:** A 15-20-page literature review paper (*based on current literature*)

**Common Assignments.**

N/A

**Other Assignments.**

**100 points:** Class Attendance and Participation (10 points each class)

Completion of weekly class activities, participation in class discussions, and project presentation update discussions throughout the semester. Weekly warm-ups and closure activities will be included in class participation points. **Points missed due to absences cannot be made up. Excessive absences can result in additional penalties and potential withdrawal from class.**
**40 points: Research Article Summary**
Completion of a recent research study (last five years) that you could possibly extend and replicate for your own application study. Please use the “how to summarize research article” to understand the components of a good article summary. You will use this similar format for your literature review in your final project. You must identify the purpose of the study, the participants and methods, results of the study, discussion and limitations, and future research implications. Be sure to address the major components of a study: purpose, methods-participants, materials, process/procedures, results of study, discussion, etc….

**60 points: Human Subjects**

**30 pts:** Completion of GMU **Mandatory** Training for Persons Conducting Research Using Human Subjects that is accessed at [http://www.citiprogram.org](http://www.citiprogram.org).
**Seven learner modules in the Basic Course** are required prior to conducting any research at Mason using human subjects. In addition, if the information in any of the optional modules relates to your research, you are required to complete the appropriate module.

**30 pts:** Mini Research Proposal. Completion of a basic research proposal for the class project is expected. Further details will be provided but will cover *purpose of study, type of research design, & methodology of study*.

**100 points: Final exam (take home exam)** Provided on the first night of class and may be worked on throughout the course.

**100 points: Application or Literature Review Projects** Final research project or literature review paper.

**100 points: Poster & Poster Sessions Presentation** Final presentation of research project or literature review paper.

**IN-DEPTH ASSIGNMENTS**

**Attendance and Participation (100 points)** Completion of weekly class activities, participation in class discussions and presentation update discussions.

**Research Article Summary (40 points)**
Completion of a recent research study (last five years) that you could possibly extend and replicate for your own application study. Please use the “how to summarize research article” to understand the components of a good article summary. You will use this similar format for your literature review in your final project. You must identify the purpose of the study, the participants and methods, results of the study, discussion and limitations, and future research
implications. Be sure to address the major components of a study: purpose, methods-participants, materials, process/procedures, results of study, discussion, etc. DUE: June 11th

Human Subjects Assignments—Training Modules for Persons Conducting Research Using Human Subjects (30 points)

GMU Mandatory Training for Persons Conducting Research Using Human Subjects is accessed at [http://www.citiprogram.org](http://www.citiprogram.org). Seven learner modules in the Basic Course are required prior to conducting any research at Mason using human subjects. In addition, if the information in any of the optional modules relates to your research, you are required to complete the appropriate module. You will turn in a copy of the printed certificate on the due date provided to show completion of the seven modules in the basic course. DUE: June 18th

Mini Research Proposal (30 points)

Completion of a basic research proposal for the class project is expected. Components of the research proposal will cover purpose of study, type of research design, & methodology of study. DUE: June 25th

Take Home Final Exam (100 points)

At the beginning of the class you will receive a take home final exam. You will choose when to work on the exam—either through the length of the course or at the end of the semester. My recommendation is that you work on the final exam through the entire length of the course as topics/questions are discussed. DUE: July 23rd

Final Project DUE: LAST NIGHT OF CLASS- July 30th (100 points)

Option 1: Research Application Project (100 points) (you may work with a partner on the final project)

The research application project is designed to provide experience in designing, implementing, and evaluating a research application project in special education. Any of the research designs covered are appropriate. Specific guidelines for the assignment will be provided. Be sure to have your research question and design approved by the instructor PRIOR to beginning implementation of your project. A hard copy AND an electronic copy of the project should be submitted by 4:30 pm on the due date.

Scoring Rubric for Research Application Project

Exemplary paper (95-100 points): Appropriate topic, thorough and thoughtful review of previous research, appropriate and clearly described implementation procedures, careful measurement and evaluation of results, thorough and appropriate discussion of implications of findings. Good writing style, free of mechanical or stylistic errors, appropriate use of APA format.
Adequate paper (85-94 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 (70-84 points): Overall, acceptable but with one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style, or implementation of project.

Inadequate paper (1-69 points): Paper with substantial problems in important areas such as writing, implementation of intervention, evaluation of results, overall thoughtfulness. Contains little or no information of value to special education practice.

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.

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Option 2: Library Research Literature Review

You may select to complete a literature review. You may select to complete a traditional research literature review paper of a selected intervention area. You will need to collect 20 original research studies on a particular topic to include in your review paper (from journals or electronic journals). Specific guidelines will be provided. Have your topic approved prior at the beginning of your research process. A hard copy AND an electronic copy of the project should be submitted by 4:30 pm on the due date.

Scoring Rubric for Library Research Literature Review

Exemplary paper (95-100 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 (85-94 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 (70-84 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.
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**Poster & Poster Sessions Presentation (100 points)**

**DUE —LAST NIGHT OF CLASS DUE: July 30**

1. Make a brief (15-minute) poster presentation that summarizes your written research project or literature review. Be prepared to answer questions about your project. More details will be provided about the format for posters. *Examples of projects/posters will be provided in class.*

2. Prepare visual materials/poster for use in your presentation—copies of charts, graphs and photos, etc…

**Scoring Rubric for Poster and Presentations**

**Exemplary poster & presentation (95-100 points):** Poster clearly describes major elements of the project; poster reflects clarity, organization, knowledge and interest in the content being presented; reflects a high level of preparation; makes effective use of visual format and presents an interesting, attractive appearance; describes very clearly the methods under consideration; presentation keeps the audience engaged; provide information of interest and value to audience. Presenter is able to answer basic audience questions about the proposal with poise, clarity, and thoughtfulness.

**Adequate presentation (85-94 points):** Good overall poster presentation, but may be lacking in one or two of the criteria specified in exemplary response. May seem a little less polished or prepared, may be vague in some places, or may fail to completely answer audience questions.

**Marginal presentation (70-84 points):** Poster presentation provides relevant information, but demonstrates only a limited understanding of the topic or project. Style, organization, or visual elements may be less than adequate. Responses to audience questions may reflect lack of understanding of relevant research methods.
**Inadequate presentation (1-69 points):** Weak overall presentation that reflects very little knowledge of topic or project. May appear very poorly prepared, or may not have followed directions. Style or visual elements may be inadequate or lacking.

**Unacceptable/no presentation (0 points):** Completely unsatisfactory presentation, with no reasonable reference to topic or project; or no presentation made.

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**Schedule**

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<tr>
<th>Date</th>
<th>Class Topic &amp; Reading Assignments</th>
<th>Class Activities/Assignments</th>
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<tr>
<td><strong>Class 1</strong></td>
<td><strong>Course Overview</strong></td>
<td><strong>Assignments Due:</strong></td>
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<tr>
<td>Tuesday,</td>
<td>Review syllabus</td>
<td><strong>Read Chapter 12 after class tonight</strong></td>
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<td>May 28th</td>
<td>Quantitative/Qualitative Research Methodology Overview</td>
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<td>What teachers think of research-based practices (research article discussion)-teacher perspectives</td>
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<td>Components of action research</td>
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<td>Research-based practices article and summary</td>
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<td><strong>Class 2</strong></td>
<td>Replicating and extending an existing study</td>
<td><strong>Assignments Due:</strong></td>
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<td>June 4th</td>
<td>Action Research- is your teaching effective? If not, now what?</td>
<td>Please read Chapters 1, 2, 3, 7, using surveys in non-experimental research (pp.196-202), &amp; Chapter14</td>
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<td>Qualitative Research: Spotlight on survey designs and creating surveys for your application project</td>
<td><strong>Class Assignments:</strong></td>
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| Class 3  
| June 11<sup>th</sup> | **Qualitative Research: Research Designs and Analysis and Reviewing the literature and defining a question to explore**  
|  | Replicating and extending an existing study  
|  | Qualitative Research designs  
|  | Conducting a literature review  
|  | Introduction to Protection of Human Subjects in Research On-line modules (CITI)  
|  | Human Subjects requirements-models/samples  
|  | **Assignments Due:**  
|  | Please read Chapter 7-using surveys in non-experimental research, Chapter 4 & 6 Chapter 10  
|  | **Class Assignments:**  
|  | Practice qualitative coding activity  
|  | **Research study summary due**  
|  | **Provide topic/idea for final project**  

| Class 4  
| June 18<sup>th</sup> | **Quantitative Research: Research Designs**  
|  | Nonexperimental and experimental research designs: survey, single subject, experimental and correlational designs)  
|  | **Final projects** - we will spend time getting started on this process  
|  | **Assignments Due:**  
|  | Work on application project or literature review Chapters 7, 8, & 11  
|  | **Class Assignments:**  
|  | CITI Program Human Subjects Certification due.  

| Class 5  
| June 25<sup>th</sup> | **Quantitative Research: Research Designs continued**  
|  | Quantitative/Qualitative Research Data Analysis  
|  | Educational Measurement and Measures and Statistical Inferences  
|  | **Assignments Due:**  
|  | Work on application project or literature review Read Chapters 5 & 9  
|  | **Class Assignments:**  
|  | Mini Research Proposal due  

| Class 6  
| July 2<sup>nd</sup> | **No face-to-face class this week. Outside class work expectations this week.**  
|  | **Assignments Due:** N/A  

| Class 7  
| July 9<sup>th</sup> | **Quantitative Research: Research Designs continued**  
|  | Quantitative/Qualitative Research Data Analysis  
|  | **Assignments Due:**  
|  | Work on application project or literature review Read Chapters 5 & 9  

Conners-EDSE 590 672: Summer 2013
| Class 8 | July 16<sup>th</sup> | Educational Measurement and Measures and Statistical Inferences  
**Bring in draft papers/projects** - we will spend time reviewing/working | **Assignments Due:**  
Work on application project or literature review  
Chapter 13 & 14 |
|---|---|---|---|
| Class 9 | July 23<sup>rd</sup> | **Discussion and Conclusions Sections**  
**Bring in draft papers/projects** - we will spend time reviewing/working | **Assignments Due:**  
Work on application project or literature review  
Work on posters  
**TAKE HOME FINAL EXAM DUE** |
| Class 10 | July 30<sup>th</sup> | **Work on papers and posters**  
Action Research Revisited  
**LAST CLASS!**  
**PROJECT PRESENTATIONS** — poster sessions for final projects | **Assignments Due:**  
**PROJECTS/PAPERS AND POSTERS DUE**  
Poster Presentations |
Appendix

FIRST OPTION FOR SIGNATURE ASSIGNMENT:

Scoring Rubric for Research Application Project (100 points)

Exemplary paper (95-100 points): Appropriate topic, thorough and thoughtful review of previous research, appropriate and clearly described implementation procedures, careful measurement and evaluation of results, thorough and appropriate discussion of implications of findings. Good writing style, free of mechanical or stylistic errors, appropriate use of APA format.

Adequate paper (85-94 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 (70-84 points): Overall, acceptable but with one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style, or implementation of project.

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SECOND OPTION FOR SIGNATURE ASSIGNMENT:

Scoring Rubric for Library Research Literature Review

Exemplary paper (95-100 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 (85-94 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 (70-84 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.

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### Scoring Rubric for Poster and Poster Session Presentations

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