



EDGR 5920

PROCEDURES IN
EDUCATION RESEARCH



North Carolina Central University

"Communicating to Succeed."

School of Education

"Preparing Educators for Diverse Cultural Contexts for the 21st Century."

Syllabus

EDGR 5920 – OL2

Procedures in Educational Research

Spring 2025

3 Credit Hours

Instructor: Racheal Brooks, Ph.D.

Email: rmbrooks@nccu.edu (Email is the best way to contact me.)

Virtual Office Hours: By appointment via Zoom

Virtual Office Link: [Dr. Brooks's Zoom Room](#)

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Course Catalog Description:

EDGR 5920: Procedures in Educational Research (3) Prerequisite: EDGR 5910

Procedures in Educational Research is an introductory course in educational research and is oriented to the methodology of research and investigation in education. You will develop, with guidance, a research outline (research proposal) with emphasis on the following: (1) statement of problem, (2) related studies, (3) rationale of the proposed study, (4) hypothesis writing, and (5) procedures to be used in collection and evaluation of data. The course will include some examination of studies in the field of education and their significance for educational practice.

Course Methodology

This course is 100% asynchronous (**no live class meetings required**) online, with students expected to use NCCU’s Canvas Learning Management System for all coursework. Students are expected to complete and submit all assignments in Canvas. Students are expected to complete all reading assignments, participate in discussion board forums, and complete all assignments by due dates outlined in the course outline. Carefully read this syllabus and our course schedule. These documents will give you the information you need to know about the course. Contact me with any questions or concerns at any time.

Required Text

Gravetter, F.J. & Forzano, L.B. (2017). Research Methods for the Behavioral Sciences (6th edition) by Cengage Brain (1 term Printed MindTap Access Card, ISBN 9781337619585).

Please note that your access to Cengage/MindTap is part of your tuition, and you will not need to purchase a course code to access it. Students must register for an account with *MindTap* within 24 hours of the beginning of the course. The registration instructions are housed on Canvas under the Interactive Syllabus tab and within the Pre-Course Activities module. If you are having trouble opening the website, be sure to **disable pop-up blockers**. Additionally, the textbook website works best using the Google Chrome browser.

Course Outcomes:

Students will be exposed to the fundamental concepts, principles, procedures, and techniques of research in education. The focus of the course will be on “quantitative” approaches to research in education. However, “qualitative” approaches will also be discussed. One major goal of the course is to help students develop competence in critically evaluating published reports of research. A second major goal of the course is to help students gain some understanding of the research proposal process and acquire the skills for preparing a

research proposal in education or counseling. The necessity of matching the inquiry method chosen to the type of question being investigated will be emphasized. EDGR 5920 is consistent with professional standards that emphasize the role of data, active inquiry, and careful analysis in decision-making in education (see ELCC, NCATE, the North Carolina Department of Public Instruction Standards and CACREP).

Student Learning Outcomes (SLOs):

In alignment with NCATE and CACREP Standards (2009), upon completing this course, students will be able to:

1. Demonstrate professional knowledge and skills for other school personnel by using research to improve practice (NCATE Standard 1.5)
2. Differentiate and utilize research methods in the following ways: (CACREP II.G.8.)
 - a. the importance of research in advancing the counseling profession (CACREP II.G.8.a.)
 - b. research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research (CACREP II.G.8.b.)
 - c. statistical methods used in conducting research and program evaluation (CACREP II.G.8.c.)
 - d. the use of research to inform evidence-based practice (CACREP II.G.8.e., CEP Objective 10)
 - e. ethical and culturally relevant strategies for interpreting and reporting the results of research and/or program evaluation studies (CACREP II.G.8.f.)
3. Utilize appropriate assessment tools and procedures (CEP Objective 8)



Expected Competencies

Upon completion of the course, students should also be able to:

1. Articulate the characteristics of research in particular in areas of education and counseling.
2. Critically evaluate published research studies retrieved from the literature.
3. Design educational research based on a method of inquiry: quantitative or qualitative methods.
4. Proficiently search the library and access various Internet resources useful to educational researchers.
5. Create a concept map in order to communicate the important concepts, hierarchy, and relationships in own research proposal.
6. Collaborate with peers and provide them with constructive feedback to support each other's learning of the research process.

Foliotek Statement & Requirement

Foliotek is an electronic portfolio adapted by the School of Education. Please check with your department or program for the required assignments to upload.

Canvas Website

This class will be online and utilize the campus "Canvas" system. Every candidate/student will be set up with a username and password (if you don't already have one). You will be required to log on to the Canvas system in order to fulfill various assignments during the semester (e.g., submit assignments, obtain handouts). If you have questions about your Canvas account please IT department **first** at 919-530-7676. **Please access Canvas by going to nccu.instructure.com and log in using your MyEOL username and password.**

Minimum Technological Requirements

In this online-course, you should have access to a computer with a web camera and voice recording capabilities. If your computer does not have a functioning built-in microphone, you will need to purchase one. You should also have a device to play audio (i.e. built-in or external speakers, a headset, etc.). This course also requires that you have basic technological skills and knowledge of the Canvas Learning Management System. Follow the links below to learn more about the basic technological skills required for this course:

1. [Using the Canvas Learning Management System](#)
2. [Using your Google-sponsored NCCU account](#)
3. [Copying and pasting](#)
4. [How to install programs on a computer \(Mac & PC\)](#)

Email Correspondence

When contacting me via email, your email subject line should be relevant to your email content. Please use "EDGR 5920:" and then describe the nature of your email. **Email is the BEST way to contact me.** I check my University email account Monday through Friday between the hours of 8am and 5pm, except on University-observed holidays. You can expect a response to your email within 24 hours. If your email is sent after Friday at 5pm, you can expect a response the following business day.

Course Format

You have chosen to take EDGR 5920 Procedures in Educational Research online during the spring semester. Online learning is different from traditional, face-to-face classes. While the material presented for this course fulfills NCATE, CACREP and NCCU's School of Education standards, the delivery of the material is different from traditional classroom instruction and requires students to be active participants in their own learning.

Requirements for this Course

Understanding the Calendar

This course term lasts from January 13th – May 5th. Weeks will be Monday 12:00 midnight through Sunday 11:59PM. Be sure to utilize a calendar to organize how you will complete all assignments for this course.

Class Participation

All students are expected to "attend class," which means participate in scholarly dialogue with classmates weekly and complete the weekly tasks as posted on the Canvas course site and within MindTap. It is expected that **all students** engage in respectful intellectual discourse throughout the term. **Please submit your Intent to Participate (7 points)** found in the Pre-Course Activities module by **Friday, January 17th** to confirm your participation in the course.

Please Note: Regarding attendance and participation within Canvas discussions as well as interactions with your classmates and me, you will be graded using the following criteria:

- Demonstrate effective leadership skills;
- Actively engage in class activities and participate;
- Contribute to class discussion displaying critical and creative thinking skills; and
- Demonstrate dispositions consistent with an inclusive, multicultural, and ethical teaching or counseling role in promoting well-being, healthy relationships, academic success, and career mastery.

Description of Tasks Per Week

Intent to Participate (7 points) – You will earn an additional 7 points toward your total points in the course simply by confirming your attendance by January 17, 2025.



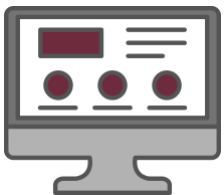
Chapter Review Quizzes/Spotlight on Research (343 points) – While reading the text chapters, you will take several mini-quizzes throughout each chapter via MindTap to facilitate digital submission and objective grading. Additionally, you will complete the “Spotlight on Research” at the end of each chapter to apply the target concepts to real-world research situations. You will be able to complete the quizzes and “Spotlights on Research” at multiple sittings and will have three opportunities to earn the highest score for each question. You will receive immediate feedback after each question attempt and have a chance to correct your mistakes by making the second and/or the third question attempt with no penalty.

Weekly Discussions (225 points) – I will post a set of discussion questions within the weekly modules related to each chapter. Your replies to these chapter discussion questions via Canvas will be counted toward the course discussions grade. Course attendance is required and measured through your timely reply to the weekly discussion questions. Guidelines for weekly discussions will be available within Canvas. I encourage you to use these discussion questions as an opportunity to “make sense” of research methods and post messages that are relevant to your personal and professional lives.



CITI (Collaborative Institutional Training Initiative) & Reflection Paper (100 points) -- CITI Program's Human Subjects Research (HSR) content includes four tracks, which cover the historical development of human subjects' protections as well as current information on regulatory and ethical issues. For this course, you are required to complete all modules in the CITI training for graduate students. These modules are:

1. Belmont Report and Its Principles
2. History and Ethical Principles–SBE
3. Defining Research with Human Subjects –SBE
4. The Federal Regulations –SBE
5. Assessing Risk-SBE
6. Informed Consent –SBE
7. Privacy and Confidentiality –SBE
8. North Carolina Central University



After completing the CITI training, you will write a 1-2 page reaction paper identifying what you learned and how you believe this information will specifically relate to your field. Both the CITI training certificate and reaction paper are due at the end of **Unit 1**. If you have previously completed the abovementioned CITI training modules **within the past two years**, you may submit your previously earned certificate along with your reaction paper.

Annotated Bibliography (100 points) – You will submit an annotated bibliography by the end of **Unit 2**. Consult the resources found in the **Unit 2** module for guidance. The annotated bibliography should align with your research question(s) or hypothesis and relate to your IRB.

Your annotated bibliography must be formatted according to APA 7th Edition Style with 1” x 1” margins. Be sure to write in Times New Roman/Calibri/Arial, 12 point font and include at least 10 books, websites, and/or peer-reviewed articles published within the last 10 years. When selecting sources for and writing your annotated bibliography, consider the following questions:



1. What is the research problem?
2. What is/are your research questions OR what is/are your research and null hypothesis?
3. General overview of the literature: What does the existing literature and research say about your research topic or question?
4. What relevance does this research have to you?
5. What relevance does this research have to your field?



Data Collection in Action (100pts) – In **Unit 3**, you will have the opportunity to critique the data collection and analysis methods utilized in thesis or dissertation in the field of educational research. The successful Data Collection in Action assignment will include a submission of no more than five pages that includes: a detailed coverpage, description of the purpose of the thesis or dissertation study, critique of the literature, summary and critique of the methodology, summary and critique of the study findings, and your potential redesign of the study. Additional instructions and rubric criteria will be available with the assignment instructions posted in **Unit 3**.

IRB Application with Exhibits (125 points) – At the end of the term, you will be asked to submit a completed IRB application with exhibits. Your application should include a complete cover page, Form A, Conflict of Interest Certification, in addition to anything needed from appendix B.

Exhibits would include your consent forms, recruitment materials (e.g. colorful flyers with graphics), emails to participants, any measures used (e.g. IQ test or Beck’s Depression Inventory or Cross’ Racial Identity Scale), demographic questionnaire, quick field screener (helps determine eligibility for study), etc. Please see the **Unit 4** link on Canvas for examples from my research and exemplary work from previous students. Exhibits should be carefully constructed and be IRB submission ready.



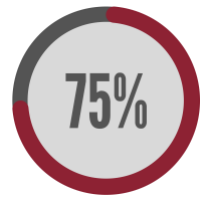
Student Evaluation – Grades will be assigned to students using the following scale.

A	900 – 1000 points
B	800 – 899 points
C	700 – 799 points
F	699 points and below
*I	Work that has not been fully completed

**An “I” grade is granted only in exceptional cases. Work must be completed within a year or the course will have to be repeated. **Attendance at an online class means posting assignments on their due dates and participating in weekly discussions on Canvas.*

The Incomplete (I) Grade Policy

The Grade of I: The grade of “I” is assigned at the discretion of the instructor when a student who is otherwise passing (completed 75% of course work) has not due to circumstances beyond his/her control, completed all the work in the course. The missing work must be completed according to the written and signed agreement between the instructor and the student within the deadline set by the instructor, not to exceed one year from the end of the semester in which the “I” was assigned. The signed written agreement must be filed in the office of the department chair or dean and a copy must also be placed in the instructor’s file at the same time that final grades are due. If the “I” is not removed during the specified time, it will automatically turn into an F or NP.



Weekly Assignments

Unit	Week	Topics	Course Activities/Assignments
Unit 1: Introduction to Research	Week 1 (January 13 – January 19)	Ch 1, Introduction, Acquiring Knowledge, and the Scientific Method	<ul style="list-style-type: none"> Chapter Review Quizzes Spotlight on Research Chapter Discussions in Canvas
	Week 2 (January 20 – January 26)	Dr. Martin Luther King, Jr. Day Observance (Jan. 20) No classes Ch 2, Research Ideas and Hypotheses	<ul style="list-style-type: none"> Chapter Review Quizzes Spotlight on Research Chapter Discussions in Canvas
	Week 3 (January 27 – February 2)	Ch 3, Defining and Measuring Variables	<ul style="list-style-type: none"> Chapter Review Quizzes Spotlight on Research Chapter Discussions in Canvas
	Week 4 (February 3 – February 9)	Ch 4, Ethics in Research	<ul style="list-style-type: none"> Chapter Review Quizzes Spotlight on Research Chapter Discussions in Canvas CITI Training and Reaction Paper due in Canvas February 9 at 11:59pm
Unit 2: Research Basics	Week 5 (February 10 – February 16)	Ch 5, Selecting Research Participants	<ul style="list-style-type: none"> Chapter Review Quizzes Spotlights on Research Chapter Discussions in Canvas
	Week 6 (February 17 – February 23)	Ch 6, Research Strategies and Validity	<ul style="list-style-type: none"> Chapter Review Quizzes Spotlight on Research Chapter Discussions in Canvas
	Week 7 (February 24 – March 2)	Ch 7, The Experimental Research Strategy Ramadan Begins (February 28)*	<ul style="list-style-type: none"> Chapter Review Quizzes Spotlight on Research Chapter Discussions in Canvas
	Week 8 March 3 – March 9)	Ch 8, Experimental Designs: Between-Subjects Design	<ul style="list-style-type: none"> Chapter Review Quizzes Spotlight on Research Chapter Discussions in Canvas Annotated Bibliography due in Canvas March 9 at 11:59pm

Unit 3: Data Collection	Week 9 (March 10 – March 16)	Spring Break	No Work Due
	Week 10 (March 17 – March 23)	Ch 9, Experimental Designs: Within-Subjects Design Ch 10, The Nonexperimental and Quasi-Experimental Strategies Spring Equinox (March 20)*	<ul style="list-style-type: none"> • Chapter Review Quizzes • Spotlights on Research • Chapter Discussions in Canvas
	Week 11 (March 24 – March 30)	Ch 11, Factorial Designs Eid al-Fitr (March 29)*	<ul style="list-style-type: none"> • Chapter Review Quizzes • Spotlight on Research • Chapter Discussions in Canvas
	Week 12 (March 31 – April 6)	Ch 12, The Correlation Research Strategy Last day to withdraw with "WC" (April 3)	<ul style="list-style-type: none"> • Chapter Review Quizzes • Spotlight on Research • Chapter Discussions in Canvas • Data Collection in Action due in Canvas Monday, April 6 at 11:59pm (due to Easter holiday)
Unit 4: Data Analysis	Week 13 (April 7 – April 13)	Ch 13, The Descriptive Research Strategy Ch 14, Single-Case Experimental Research Passover Begins (April 12)*	<ul style="list-style-type: none"> • Chapter Review Quizzes • Spotlight on Research • Chapter Discussions in Canvas
	Week 14 (April 14 – April 20)	Ch 15, Statistical Evaluation of Data Good Friday Observance (No classes – April 18) Easter (April 20)* Passover Ends (April 20)*	<ul style="list-style-type: none"> • Chapter Review Quizzes • Spotlight on Research • Chapter Discussions in Canvas
	Week 15 (April 21 – April 28)	Ch 16, Writing an APA-Style Research Report	<ul style="list-style-type: none"> • Chapter Review Quizzes • Spotlight on Research • Chapter Discussions in Canvas
Final Assessment	IRB Application Due in Canvas May 5 at 11:59pm		

Inclusive Calendar and Flexible Work

*The course calendar reflects dates in which the University is officially closed for holiday observances as well as additional holidays during which the University remains open. However, I recognize these dates may not coincide with holidays or observances you may each honor. As such, please do not hesitate to contact me regarding the need to submit assignments at alternate times if a due date conflicts with your specific observances.

Statement of Inclusion/Non-Discrimination

North Carolina Central University is committed to the principles of affirmative action and non-discrimination. The University welcomes diversity in its student body, its staff, its faculty, and its administration. The University admits, hires, evaluates, promotes, and rewards on the basis of the needs and relevant performance criteria without regard to race, color, national origin, ethnicity, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran's status, or religion. It actively promotes diversity and respectfulness of each individual.

Student Accessibility Services

Students with disabilities (physical, learning, psychological, chronic or temporary medical conditions, etc.) who would like to request reasonable accommodations and services under the Americans with Disabilities Act must register with the Office of Student Accessibility Services (SAS) in Suite 120 in the Student Services Building. Students who are new to SAS or who are requesting new accommodations should contact SAS at (919) 530-6325 or sas@nccu.edu to discuss the programs and services offered by SAS. Students who are already registered with SAS and who would like to maintain their accommodations must renew previously granted accommodations by visiting the [NCCU Accommodate Website](#) and logging into their Eagle Accommodate Student Portal. Students are expected to renew previously granted accommodations at the beginning of each semester (Fall, Spring & Summer sessions). Reasonable accommodations may be requested at any time during the semester for all students; however, accommodations are not retroactive. Returning semester requests for returning students are expected to be done within the first two weeks of the semester. Students are advised to contact their professors to discuss the testing and academic accommodations that they anticipate needing for each class.

Students identifying as pregnant or other pregnancy-related conditions who would like to request reasonable accommodations and services must register with SAS.

Note to Students

After you register with the Office of Student Accessibility Services each term and are informed of your designated accommodations, please contact me to discuss and develop a plan for the use of your accommodations. Note that although it is your decision to use any and all of the applicable accommodations throughout the term, you **must converse** with me to clarify your plan of use and coordinate the appropriate resources in advance.

Confidentiality and Mandatory Reporting

All forms of discrimination based on sex, including sexual misconduct, sexual assault, dating violence, domestic violence, and stalking offenses, are prohibited under NCCU's Sexual Misconduct Policy (POL 01.04.4). NCCU faculty and instructors are considered to be *responsible employees* and are required to

report information regarding sexual misconduct to the University's Title IX Coordinator. The Sexual Misconduct Policy can be accessed through [NCCU's Policies, Rules and Regulations website](#). Any individual may report a violation of the Sexual Misconduct Policy (including a third-party or anonymous report) by contacting the Title IX Coordinator at (919) 530-7944 or TitleIX@nccu.edu, or submitting the [online form](#).

Other Campus Programs, Services, Activities, and Resources

Other campus resources to support NCCU students include:

- Student Advocacy Coordinator. The Student Advocacy Coordinator is available to assist students in navigating unexpected life events that impact their academic progression (e.g., homelessness, food insecurity, personal hardship) and guide them to the appropriate University or community resources. Contact Information: Student Services Building, Room G19, (919) 530-7492, studentadvocacy@nccu.edu.
- Counseling Center. The NCCU Counseling Center is staffed by licensed psychologists and mental health professionals who provide individual and group counseling, crisis intervention, substance abuse prevention and intervention, anger management, and other services. The Counseling Center also provides confidential resources for students reporting a violation of NCCU's Sexual Misconduct Policy. Contact Information: Student Health Building, 2nd Floor, (919) 530-7646, conseling@nccu.edu.
- University Police Department. The University Police Department ensures that students, faculty and staff have a safe and secure environment in which they can live, learn, and work. The Department provides a full range of police services, including investigating all crimes committed in and around its jurisdiction, making arrests, providing crime prevention/community programs, enforcing parking regulations and traffic laws, and maintaining crowd control for campus special events. Contact Information: 2010 Fayetteville Street, (919) 530-6106, nccupdinfo@nccu.edu.

Ethical Standards

Universities are unique communities committed to creating and transmitting knowledge through the freedom individuals have to explore ideas and to further their own capabilities. This freedom depends on the responsible behavior of all the members of the community who must treat each other with respect. They must allow each other to develop the full range of their capabilities and take full advantage of the institution's resources. Students are expected to abide by the University academic integrity policy. Do not receive or give any assistance on tests or projects unless specifies by the instructor. For further information regarding academic integrity, academic dishonesty, cheating, plagiarism, and sanctions, refer to the [Student Code of Conduct](#).

Students are also expected to adhere to the Ethical standards of the American Counseling Association (ACA) and Association of American Educators (AAE). If you have not already familiarized yourself with ACA or AAE Ethical standards and the Universities policies on academic integrity, it is recommended that you do so:

- [AAE Code of Ethics for Educators](#)
- [ACA Code of Ethics for Counselors](#)

Plagiarism and Academic Integrity

North Carolina Central University is dedicated to instilling in its students the highest principles of integrity and responsibility. Students are expected to demonstrate respect for these principles in the performance of their academic activities. Academic dishonesty, which is a violation of academic integrity,

will be dealt with according to the provisions of the Student Code of Academic Conduct. ([Academic Honor Code](#))

Generative Artificial Intelligence

Generative Artificial Intelligence (AI e.g. ChatGPT and other Chatbots) is a powerful tool in working with data, information, text, and other materials. It is an important tool to understand and learn to apply in professional workflows. **Turning in complete texts generated by Generative Artificial Intelligence (e.g. ChatGPT and other AI Chatbots) as your own is academic dishonesty**, including in terms of both fabrication and plagiarism, but conversely AI tools are powerful ways to enhance your writing, from generating structures, questions, and prompts, to editorial review. Students are fully responsible for writing submitted under their name and **citing AI when used to support their work**.

Attendance

Participation in this online occurs through assignment submission. Note that all work should be submitted by the posted deadlines. Students who do not participate during the first week of class will be dropped due to non-attendance. You must submit at least one assignment (i.e. *Intent to Participate* assignment) during the first week of class to confirm your attendance in the course. Students who do not participate before the 10-day census date will be dropped. After the census date (the 10th day of class), any student who does not participate in the equivalent of two (2) weeks of class engagement or 13.3% of total instructional time prior to the determined drop date for the university (as noted in the Academic Calendar) will receive an automatic grade of WA (withdrawal due to lack of attendance) at the point of the withdrawal date. This will be the final grade for the grading period. This grade will automatically be entered by the faculty member teaching the course.

Special consideration will be granted if a student has accommodations as required by the Americans with Disabilities Act based on a documented disability or another documented need. Special consideration may be granted if a student is absent or late due to the student's participation in a University-sponsored program or event.

After the University's established withdrawal date, as noted in the Academic Calendar, you will earn the letter grade commensurate with your course performance. Your final grade will be based on your performance and participation, to include attendance as noted in the syllabus.