



**EDGR 5920**  
 PROCEDURES IN  
 EDUCATION RESEARCH



North Carolina Central University

*"Communicating to Succeed."*

School of Education

*"Preparing Educators for Diverse Cultural Contexts for the 21<sup>st</sup> Century."*

**Syllabus**

**EDGR 5920 – OL2**

Procedures in Educational Research

**Spring 2026**

**3 Credit Hours**

**Instructor:** Racheal Brooks, Ph.D.  
**Email:** [rmbrooks@nccu.edu](mailto:rmbrooks@nccu.edu) (However, Canvas Inbox is the best way to reach me.)  
**Virtual Office Hours:** By appointment via Zoom  
**Virtual Office Link:** [Dr. Brooks's Zoom Room](#)

Course Catalog Description:.....2  
 Course Methodology.....2  
 Required Text .....2  
 Course Outcomes:.....2  
 Student Learning Outcomes (SLOs):.....3  
 Expected Competencies .....3  
 Foliotek Statement & Requirement .....3  
 Canvas Website .....4  
 Minimum Technological Requirements.....4  
 Email Correspondence .....4  
 Course Format .....4  
 Requirements for this Course .....4  
 Understanding the Calendar.....4  
 Class Participation.....4  
 Description of Tasks Per Week .....5  
 The Incomplete (I) Grade Policy.....7  
 Weekly Assignments .....7

<b>Inclusive Calendar and Flexible Work</b> .....	<b>15</b>
<b>Statement of Inclusion/Non-Discrimination</b> .....	<b>15</b>
<b>Student Accessibility Services</b> .....	<b>15</b>
<b>Confidentiality and Mandatory Reporting</b> .....	<b>16</b>
<b>Other Campus Programs, Services, Activities, and Resources</b> .....	<b>16</b>
<b>Ethical Standards</b> .....	<b>16</b>
<b>Plagiarism and Academic Integrity</b> .....	<b>17</b>
<b>Generative Artificial Intelligence</b> .....	<b>17</b>
<b>Attendance</b> .....	<b>17</b>

**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* (6<sup>th</sup> 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 Council for the Accreditation of Educator Preparation {CAEP – 2022} and CACREP Standards {2024}).

### **Student Learning Outcomes (SLOs):**

In alignment with CAEP (2022) and CACREP Standards (2024), upon completing this course, students will be able to:

1. Apply data literacy skills to locate, interpret, analyze, and communicate educational research data in ways that inform professional decision-making and enhance learning and development opportunities for P–12 learners (CAEP-2022; CACREP 3.H.6).
2. Differentiate and justify the use of qualitative, quantitative, and mixed methods research designs based on research questions, professional contexts, and intended educational outcomes (CAEP-2022; CACREP 3.H.3).
3. Design a methodologically sound research study that integrates appropriate research design, sampling strategies, and data collection procedures aligned with educational research standards and professional practice (CAEP-2022; CACREP 3.H.3).
4. Select and explain appropriate statistical tests used in educational research and program evaluation, including justification based on data type, research design, and analytic purpose (CACREP 3.H.5; CAEP-2022).
5. Analyze and interpret research data using appropriate quantitative and/or qualitative techniques, and draw evidence-based conclusions relevant to educational practice and program evaluation (CAEP-2022; CACREP 3.H.6).
6. Evaluate ethical and legal considerations related to conducting, interpreting, and reporting educational research, including human subjects protection, data integrity, and responsible dissemination of findings (CACREP 3.H.10; CAEP-2022).
7. Communicate research findings effectively through written and/or oral formats that reflect ethical standards, methodological rigor, and relevance to educational stakeholders and professional contexts (CAEP-2022; CACREP 3.H.10).



### **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](http://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. **For the fastest replies, the Cavas Inbox is the BEST way to contact me.** You can expect a response to your email within 24 hours, excluding weekends when the anticipated response time will be within 48 hours.

## 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 12<sup>th</sup> – May 4<sup>th</sup>. 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 **Monday, January 12<sup>th</sup>** to confirm your participation in the course.

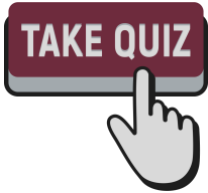
**Please Note:** Regarding attendance and participation within Canvas discussions as well as interactions with your classmates and me, you will be graded using the following criteria:

- 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 12, 2026**.

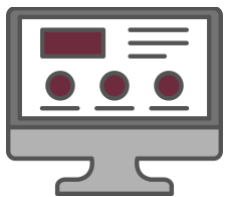


**Chapter Review Quizzes/Spotlight on Research (343 points)** – While reading the text chapters, you will take several mini-quizzes throughout each chapter via MindTap to facilitate digital submission and objective grading. Additionally, you will complete the “Spotlight on Research” at the end of each 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 (160 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 (120 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 7<sup>th</sup> 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 (120pts)** – 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 coverage, 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 (150 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.



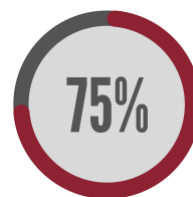
**Student Evaluation** – Grades will be assigned to students using the following scale.

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 12 – January 18)	<p><b>Ch 1, Introduction, Acquiring Knowledge, and the Scientific Method</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 1.1 Methods of Knowing and Acquiring Knowledge</li> <li>○ 1.2 The Scientific Method</li> <li>○ 1.3 The Research Process</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Introduction to Research Videos</li> </ul> <p>SciToons. (2020, October 5). <i>What is research?</i> [Video]. YouTube. <a href="https://youtu.be/mV0bUQpz468">https://youtu.be/mV0bUQpz468</a> – Duration 3:55</p> <p>Sprouts. (2017, October 5). <i>The scientific method: Steps, examples, tips, and exercise</i> [Video]. YouTube. <a href="https://youtu.be/yi0hwFDQTSQ">https://youtu.be/yi0hwFDQTSQ</a> – Duration 8:38</p> <ul style="list-style-type: none"> <li>• Participate in the Week 1 discussion forum (<b>graded</b>)</li> </ul>
	Week 2 (January 19 – January 25)	<p><b>Ch 2, Research Ideas and Hypotheses</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 2.1 Getting Started: Identifying a Topic Area</li> <li>○ 2.2 Searching the Existing Research Literature in a Topic Area</li> <li>○ 2.3 Finding an Idea for a Research Study From a Published Research Article</li> <li>○ 2.4 Using a Research Idea to Form a Hypothesis and Create a Research Study</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Research Process Videos</li> </ul> <p>Science in Motion. (2023, October 1). <i>The research process</i> [Video]. YouTube. <a href="https://youtu.be/FtwQA6oFgRM">https://youtu.be/FtwQA6oFgRM</a> – Duration 2:57</p>

		<p>Educational Hub. (2024, June 20). <i>9 common research design mistakes / Avoiding common mistakes in research design</i> [Video]. YouTube. <a href="https://youtu.be/yIV4Kt43IQ4">https://youtu.be/yIV4Kt43IQ4</a> – Duration 5:02</p> <ul style="list-style-type: none"> <li>• Participate in the Week 2 discussion forum (<b>graded</b>)</li> </ul>
<p>Week 3 (January 26 – February 1)</p>		<p><b>Ch 3, Defining and Measuring Variables</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 3.1 Constructs and Operational Definitions</li> <li>○ 3.2 Validity and Reliability of Measurement</li> <li>○ 3.3 Scales of Measurement</li> <li>○ 3.4 Modalities of Measurement</li> <li>○ 3.5 Other Aspects of Measurement</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Scales of Measurement Videos</li> </ul> <p>Quantitative Specialits. (2015, July 1). <i>Scales of measurement – Nominal, ordinal, interval, ratio (part 1) – Introductory statistics</i> [Video]. YouTube. <a href="https://youtu.be/KIBZUk39ncl">https://youtu.be/KIBZUk39ncl</a> – Duration 5:51</p> <p>Quantitative Specialits. (2015, July 1). <i>Scales of measurement – Nominal, ordinal, interval, ratio (part 2) – Introductory statistics</i> [Video]. YouTube. <a href="https://youtu.be/yJpiUHbLKLKLU">https://youtu.be/yJpiUHbLKLKLU</a> – Duration 5:14</p> <p>Brief Tutorial Statistics. (2015, November 2). <i>Scales of measurement: Nominal, ordinal, interval and ratio scale</i> [Video]. YouTube. <a href="https://youtu.be/OXTdii-b9Co">https://youtu.be/OXTdii-b9Co</a> – Duration 9:59</p> <ul style="list-style-type: none"> <li>• Participate in the Week 3 discussion forum (<b>graded</b>)</li> </ul>
<p>Week 4 (February 2 – February 8)</p>		<p><b>Ch 4, Ethics in Research</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 4.1 Introduction</li> <li>○ 4.2 Ethical Issues and Human Participants in Research</li> <li>○ 4.3 Ethical Issues and Nonhuman Subjects in Research</li> <li>○ 4.4 Ethical Issues and Scientific Integrity</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Ethics in Research Videos</li> </ul> <p>ACFID. (2017, April 20). <i>Principles and guidelines for ethical research and evaluation</i> [Video]. YouTube. <a href="https://youtu.be/yIkKCgEIMws">https://youtu.be/yIkKCgEIMws</a> – Duration 3:36</p>

		<p>Voices of the Civil Rights Movement. (2017, July 24). <i>Tuskegee syphalis experiment revealed</i> [Video]. YouTube. <a href="https://youtu.be/vz4jE7huhMA">https://youtu.be/vz4jE7huhMA</a> – Duration 2:25</p> <p>TheLitDoc. (2016, April 21). <i>Stanford prison experiment</i> [Video]. YouTube. <a href="https://youtu.be/XsRQVRoiPWE">https://youtu.be/XsRQVRoiPWE</a> – Duration 26:32</p> <p>khanacademymedicine. (2015, April 3). <i>Asch conformaty studies</i> [Video]. YouTube. <a href="https://youtu.be/p3MPAgnbMk8">https://youtu.be/p3MPAgnbMk8</a> – Duration 9:56</p> <ul style="list-style-type: none"> <li>• Participate in the Week 4 discussion forum (<b>graded</b>)</li> <li>• <b>CITI Certificate and Reaction due in Canvas February 8<sup>th</sup> at 11:59pm</b></li> </ul>
<p><b>Unit 2:</b></p> <p><b>Research Basics</b></p>	<p>Week 5 (February 9 – February 15)</p>	<p><b>Ch 5, Selecting Research Participants</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 5.1 Introduction to Sampling</li> <li>○ 5.2 Probability Sampling Methods</li> <li>○ 5.3 Nonprobability Sampling Methods</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Sampling Videos</li> </ul> <p>Simple Learning Pro. (2015, November 25). <i>Types of sampling methods</i> [Video]. YouTube. <a href="https://youtu.be/pTuj57uXWIk">https://youtu.be/pTuj57uXWIk</a> – Duration 4:50</p> <p>Dr Nic’s Maths and Stats. (2012, March 13). <i>Sampling: Simple random, convenience, systematic, cluster, stratified</i> [Video]. YouTube. <a href="https://youtu.be/be9e-Q-jC-0">https://youtu.be/be9e-Q-jC-0</a> – Duration 4:53</p> <ul style="list-style-type: none"> <li>• Participate in the Week 5 discussion forum (<b>graded</b>)</li> </ul>
	<p>Week 6 (February 16 – February 22)</p> <p><b>Ramadan Begins (February 17)*</b></p>	<p><b>Ch 6, Research Strategies and Validity</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 6.1 Research Strategies</li> <li>○ 6.2 External and Internal Validity</li> <li>○ 6.3 Threats to External Validity</li> <li>○ 6.4 Threats to Internal Validity</li> <li>○ 6.5 More about Internal and External Validity</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Validity Videos</li> </ul> <p>Institute of Education Sciences. (2017, April 19). <i>Reliability and validity</i> [Video]. YouTube. <a href="https://youtu.be/L-ofOlsu4U">https://youtu.be/L-ofOlsu4U</a> – Duration 1:34</p>

		<p>TED-Ed. (2015, April 14). <i>What's the difference between accuracy and precision?</i> [Video]. YouTube. <a href="https://youtu.be/hRAFPdDppzs">https://youtu.be/hRAFPdDppzs</a> – Duration 4:53</p> <p>Dr EK Potter. (2016, January 17). <i>Random and systematic error</i> [Video]. YouTube. <a href="https://youtu.be/bW2LFrbM Ik">https://youtu.be/bW2LFrbM Ik</a> – Duration 5:52</p> <p>Daniel M. (2018, March 28). <i>Random error, systematic error, precision, accuracy</i> [Video]. YouTube. <a href="https://youtu.be/iPLN6FgYA58">https://youtu.be/iPLN6FgYA58</a> – Duration 15:02</p> <ul style="list-style-type: none"> <li>• Participate in the Week 6 discussion forum (<b>graded</b>)</li> </ul>
<p>Week 7 (February 23 – March 1)</p>		<p><b>Ch 7, The Experimental Research Strategy</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 7.1 Cause-and-Effect Relationships</li> <li>○ 7.2 Distinguishing Elements of an Experiment</li> <li>○ 7.3 Controlling Extraneous Variables</li> <li>○ 7.4 Control Conditions and Manipulation Checks</li> <li>○ 7.5 Increasing External Validity: Simulation and Field Studies</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Experimental Research Videos</li> </ul> <p>Psych Explained. (2021, May 4). <i>Experimental design: Variables, groups, and random assignment</i> [Video]. YouTube. <a href="https://youtu.be/xDWdJI XT3k">https://youtu.be/xDWdJI XT3k</a> – Duration 10:47</p> <p>Simple Learning Pro. (2015, November 23). <i>Causation vs association, and an introduction to experiments</i> [Video]. YouTube. <a href="https://youtu.be/kKHx9T6XUIO">https://youtu.be/kKHx9T6XUIO</a> – Duration 7:05</p> <p>Simple Learning Pro. (2015, November 25). <i>Placebo effect, control groups, and the double blind experiment</i> [Video]. YouTube. <a href="https://youtu.be/GMqrOdCx4Yg">https://youtu.be/GMqrOdCx4Yg</a> – Duration 3:35</p> <p>Simple Learning Pro. (2015, November 25). <i>Types of experimental designs (3.3)</i> [Video]. YouTube. <a href="https://youtu.be/10ikXret7Lk">https://youtu.be/10ikXret7Lk</a> – Duration 6:36</p> <ul style="list-style-type: none"> <li>• Participate in the Week 7 discussion forum (<b>graded</b>)</li> </ul>
<p>Week 8 March 2 – March 8)</p>		<p><b>Ch 8, Experimental Designs: Between-Subjects Design</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 8.1 Introduction to Between-Subjects Experiments</li> <li>○ 8.2 Individual Differences as Confounding Variables</li> <li>○ 8.3 Limiting Confounding by Individual Differences</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>○ 8.4 Individual Differences and Variability</li> <li>○ 8.5 Other Threats to Internal Validity of Between- Subjects Designs</li> <li>○ 8.6 Applications and Statistical Analyses of Between-Subjects Designs</li> <li>● Spotlight on Research (<b>graded</b>)</li> <li>● Chapter Summary (you do not need to answer the questions)</li> <li>● Watch Between-Subjects Design Videos</li> </ul> <p>numiqo. (2024, February 5). <i>Between-subject design vs. within-subject design</i> [Video]. YouTube. <a href="https://youtu.be/fJabKd7Wyr0">https://youtu.be/fJabKd7Wyr0</a> – Duration 8:26</p> <p>BRAINPSYCHLOPEDIA. (2021, September 25). <i>Experimental study designs – Between &amp; within subjects design</i> [Video]. YouTube. <a href="https://youtu.be/K10wnb-MTsl">https://youtu.be/K10wnb-MTsl</a> – Duration 17:27</p> <ul style="list-style-type: none"> <li>● Participate in the Week 8 discussion forum (<b>graded</b>)</li> <li>● <b>Annotated Bibliography due in Canvas March 8<sup>th</sup> at 11:59pm</b></li> </ul>
<b>Unit 3:</b>  <b>Data Collection</b>	Week 9 (March 9 – March 15)	<b>Spring Break</b> No Work Due
	Week 10 (March 16 – March 22)  <b>Eid al-Fitr          (March 19)*</b>  <b>Spring Equinox          (March 20)*</b>	<b>Ch 9, Experimental Designs: Within-Subjects Design</b> <b>Ch 10, The Nonexperimental and Quasi-Experimental Strategies</b> <ul style="list-style-type: none"> <li>● Chapter Overviews</li> <li>● Chapter Mastery Trainings (optional)</li> <li>● Readings and <b>graded</b> mini-quizzes for:           <ul style="list-style-type: none"> <li>○ 9.1 Within-Subjects Experiments and Internal Validity</li> <li>○ 9.2 Dealing with Time-Related Threats and Order Effects</li> <li>○ 9.3 Comparing Within-Subjects and Between-Subjects Designs</li> <li>○ 9.4 Applications and Statistical Analysis of Within-Subject Designs</li> </ul> </li> <li>○ 10.1 Nonexperimental and Quasi-Experimental Research Strategies</li> <li>○ 10.2 Between-Subjects Nonexperimental and Quasi-Experimental Designs: Nonequivalent Group Designs</li> <li>○ 10.3 Within-Subjects Nonexperimental and Quasi-Experimental Designs: Pre-Post Designs</li> <li>○ 10.4 Developmental Research Designs</li> <li>○ 10.5 Applications, Statistical Analysis, and Terminology for Nonexperimental Quasi-Experimental and Developmental Designs</li> </ul> <ul style="list-style-type: none"> <li>● Spotlights on Research (<b>graded</b>)</li> <li>● Chapter Summaries (you do not need to answer the questions)</li> <li>● Watch Within-Subjects Design Video</li> </ul> <p>Dr. Nardi. (2022, February 4). <i>Within subjects designs</i> [Video]. YouTube. <a href="https://youtu.be/RF8_w1Bdrtc">https://youtu.be/RF8_w1Bdrtc</a> – Duration 12:27</p> <ul style="list-style-type: none"> <li>● Watch Nonexperimental and Quasi-Experimental Strategies Videos</li> </ul>

		<p>Dr. Elliott Jardin. (2020, November 23). <i>Quasi-experimental vs. experimental</i> [Video]. YouTube. <a href="https://youtu.be/MkKhbkPw5pE">https://youtu.be/MkKhbkPw5pE</a> – Duration 2:23</p> <p>Last Name, F. M. [Username]. (Year, Month Date). <i>Quasi-experimental design</i> [Video]. YouTube. URL – Duration 5:20</p> <ul style="list-style-type: none"> <li>• Participate in the Week 10 discussion forum (<b>graded</b>)</li> </ul>
<p>Week 11 (March 23 – March 29)</p>		<p><b>Ch 11, Factorial Designs</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 11.1 Introduction to Factorial Designs</li> <li>○ 11.2 Main Effects and Interactions</li> <li>○ 11.3 Types of Factorial Designs and Analysis</li> <li>○ 11.4 Applications of Factorial Designs</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Factorial Designs Videos</li> </ul> <p>NEJM Group. (2024, August 29). <i>How factorial design works   NEJM evidence</i> [Video]. YouTube. <a href="https://youtu.be/iwARCun8D9w">https://youtu.be/iwARCun8D9w</a> – Duration 5:02</p> <p>numiqo. (2024, January 25). <i>Full factorial design (DoE – design of experiments) simply explained</i> [Video]. YouTube. <a href="https://youtu.be/cHoYAyYHzB0">https://youtu.be/cHoYAyYHzB0</a> – Duration 14:22</p> <ul style="list-style-type: none"> <li>• Participate in the Week 11 discussion forum (<b>graded</b>)</li> </ul>
<p>Week 12 (March 30 – April 5)</p> <p><b>Passover Begins (April 1)*</b></p> <p> <b>Last day to withdraw with "WC" (April 2)</b></p> <p><b>Good Friday Observance (No classes – April 3)</b></p> <p><b>Easter (April 5)*</b></p>		<p><b>Ch 12, The Correlation Research Strategy</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 12.1 An Introduction Correlational Research</li> <li>○ 12.2 The Data and Statistical Analysis for Correlational Studies</li> <li>○ 12.3 Applications of the Correlational Strategy</li> <li>○ 12.4 Strengths and Weaknesses of the Correlational Research Strategy</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Correlational Research Videos</li> </ul> <p>Pysch Explained. (2016, December 2). <i>What is correlational research? Finding relationships between variables</i> [Video]. YouTube. <a href="https://youtu.be/30g69EGghKQ">https://youtu.be/30g69EGghKQ</a> – Duration 7:30</p> <p>Storage, D. (2019, December 9). <i>Types of research designs – Correlational studies</i> [Video]. YouTube. <a href="https://youtu.be/ZXpHaVqXqj4">https://youtu.be/ZXpHaVqXqj4</a> – Duration 10:02</p>

		<ul style="list-style-type: none"> <li>• Participate in the Week 12 discussion forum (<b>graded</b>)</li> <li>• <b>Data Collection in Action due in Canvas April 6<sup>th</sup> at 11:59pm</b></li> </ul>
<p><b>Unit 4:</b></p> <p><b>Data Analysis</b></p>	<p>Week 13 (April 6 – April 12)</p> <p><b>Passover Ends (April 9)*</b></p>	<p><b>Ch 13, The Descriptive Research Strategy</b></p> <p><b>Ch 14, Single-Case Experimental Research</b></p> <ul style="list-style-type: none"> <li>• Chapter Overviews</li> <li>• Chapter Mastery Trainings (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 13.1 An Introduction to Descriptive Research</li> <li>○ 13.2 The Observational Research Design</li> <li>○ 13.3 The Survey Research Design</li> <li>○ 13.4 The Case Study Design</li> </ul> </li> <li>○ 14.1 Introduction</li> <li>○ 14.2 Phases and Phase Changes</li> <li>○ 14.3 Reversal Designs: ABAB and Variations</li> <li>○ 14.4 Multiple-Baseline Designs</li> <li>○ 14.5 General Strengths and Weaknesses of Single-Case Designs</li> </ul> <ul style="list-style-type: none"> <li>• Spotlights on Research (<b>graded</b>)</li> <li>• Chapter Summaries (you do not need to answer the questions)</li> <li>• Watch Descriptive Research Videos</li> </ul> <p>researchjimminy. (2009, June 21). <i>Constant comparison stop motion demo</i> [Video]. YouTube. <a href="https://youtu.be/nxlErX3aQQ">https://youtu.be/nxlErX3aQQ</a> – Duration 3:29</p> <p>Quirkos – Simple Qualitative Analysis Software. (2019, November 19). <i>Beginners guide to coding qualitative data</i> [Video]. YouTube. <a href="https://youtu.be/IYzhgMZii3o">https://youtu.be/IYzhgMZii3o</a> – Duration 9:00</p> <ul style="list-style-type: none"> <li>• Watch Single-Case Experimental Research Design Video</li> </ul> <p>Dr. Bev Knox – Psychology Lectures. (2025, March 5). <i>Single subject designs explained – Research methods</i> [Video]. YouTube. <a href="https://www.youtube.com/watch?v=27-nZQQs_o">https://www.youtube.com/watch?v=27-nZQQs_o</a> – Duration 5:31</p> <ul style="list-style-type: none"> <li>• Participate in the Week 13 discussion forum (<b>graded</b>)</li> </ul>
	<p>Week 14 (April 13 – April 19)</p>	<p><b>Ch 15, Statistical Evaluation of Data</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 15.1 The Role of Statistics in the Research Process</li> <li>○ 15.2 Descriptive Statistics</li> <li>○ 15.3 Inferential Statistics</li> <li>○ 15.4 Finding the Right Statistics for Your Data</li> <li>○ 15.5 Special Statistics for Research</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Statistical Evaluation Videos</li> </ul>

		<p>Simple Learning Pro. (2015, October 16). <i>Introduction to statistics (1.1)</i> [Video]. YouTube.  <a href="https://www.youtube.com/watch?v=MXaJ7sa7q-8">https://www.youtube.com/watch?v=MXaJ7sa7q-8</a> –Duration 4:50</p> <p>StatQuest with Josh Starmer. (2020, July 6). <i>Hypothesis testing and the null hypothesis, clearly explained!!!</i> [Video]. YouTube.  <a href="https://www.youtube.com/watch?v=0oc49DyA3hU">https://www.youtube.com/watch?v=0oc49DyA3hU</a> – Duration 14:40</p> <p>Simple Learning Pro. (2015, November 18). <i>Explanatory and response variables, correlation (2.1)</i> [Video]. YouTube.  <a href="https://youtu.be/DAH8DyLXdjM">https://youtu.be/DAH8DyLXdjM</a> – Duration 7:25</p> <p>Simple Learning Pro. (2015, November 23). <i>Regression and r-squared</i> [Video]. YouTube. <a href="https://youtu.be/Q-TtIPF0fCU">https://youtu.be/Q-TtIPF0fCU</a> – Duration 6:31</p> <ul style="list-style-type: none"> <li>• Watch Mixed Methods Research Videos</li> </ul> <p>Seer Gee. (2020, September 14). <i>3 types of research design   Quantitative, qualitative &amp; mixed methods</i> [Video]. YouTube.  <a href="https://www.youtube.com/watch?v=MKVHJk8nqli">https://www.youtube.com/watch?v=MKVHJk8nqli</a> – Duration 8:18</p> <p>Grad Coach. (2021, September 27). <i>Qualitative vs quantitative vs mixed methods research: How to choose research methodology</i> [Video]. YouTube.  <a href="https://www.youtube.com/watch?v=hECPeKv5tPM">https://www.youtube.com/watch?v=hECPeKv5tPM</a> – Duration 17:37</p> <ul style="list-style-type: none"> <li>• Participate in the Week 14 discussion forum (<b>graded</b>)</li> </ul>
	<p>Week 15 (April 20 – April 27)</p>	<p><b>Ch 16, Writing an APA-Style Research Report</b></p> <ul style="list-style-type: none"> <li>• Chapter Overview</li> <li>• Chapter Mastery Training (optional)</li> <li>• Readings and <b>graded</b> mini-quizzes for: <ul style="list-style-type: none"> <li>○ 16.1 The Goal of a Research Report</li> <li>○ 16.2 General APA Guidelines for Writing Style and Format</li> <li>○ 16.3 The Elements of an APA-Style Research Report</li> <li>○ 16.4 Writing a Research Proposal</li> </ul> </li> <li>• Spotlight on Research (<b>graded</b>)</li> <li>• Chapter Summary (you do not need to answer the questions)</li> <li>• Watch Writing an APA Style Research Report Video</li> </ul> <p>Dr. Bev Knox – Psychology Lectures. (2025, March 17) <i>How to write a research report using APA style – Research methods</i> [Video]. YouTube.  <a href="https://www.youtube.com/watch?v=DlrxPblTxUY">https://www.youtube.com/watch?v=DlrxPblTxUY</a> – Duration 21:39</p> <ul style="list-style-type: none"> <li>• Participate in the Week 15 discussion forum (<b>graded</b>)</li> </ul>
<p><b>Final Assessment</b></p>	<p><b>IRB Application Due in Canvas December 8<sup>th</sup> at 11:59pm</b></p>	

### **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 providing a learning environment that is welcoming and accessible for everyone. NCCU prohibits discrimination and harassment based on race, color, national origin, religion, sex (including pregnancy), sexual orientation, gender identity, age, disability, genetic information, veteran status, or any other protected class as defined by law. The University makes all decisions regarding admissions, employment, and access to programs and activities without unlawful bias or discrimination and remains dedicated to fostering a community that values and promotes the fair and respectful treatment of every individual.

### **Student Accessibility Services**

The Office of Student Accessibility Services (SAS) assists students with disabilities by providing reasonable accommodations that support equal access to both academic and housing environments. These services are available to students with a wide range of access needs, including those related to neurodiversity, psychosocial and physical diagnoses, and other medical conditions. SAS also offers access coaching and guidance under the Americans with Disabilities Act (ADA). Students can connect with SAS in person by visiting Suite 120 in the Student Services Building, or online by visiting [www.nccu.edu/sas](http://www.nccu.edu/sas). Students who are new to SAS or who are requesting new accommodations should complete the Accessibility Request Form, which can be found at <https://myeol.nccu.edu/Request-SAS-Services#new-student-connecting-with-sas>. If students have any questions or concerns while completing the form, they may contact SAS at (919) 530-6325 or [sas@nccu.edu](mailto:sas@nccu.edu) to learn more about the programs and services available to them.

Students who are already registered with SAS and wish to continue using their accommodations must renew previously approved accommodations by logging into the Eagle Accommodate Student Portal at <https://nccu-accommodate.symphlicity.com>. The portal can also be accessed through the MyEOL portal. Students are encouraged to submit or renew accommodations before the beginning of each semester (Fall, Spring, and Summer). While accommodation can be requested at any time during the semester, they are not retroactive. Students are encouraged to speak with their professors early in the semester to discuss their approved accommodations and determine the best way to implement them in each course.

Students experiencing pregnancy who need accommodations should contact the Title IX Office. Students with pregnancy-related medical conditions or complications that substantially limit a major life activity may seek support or services through SAS.

Further information is available in the SAS [website www.nccu.edu/sas](http://www.nccu.edu/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 harassment, sexual assault, dating violence, domestic violence, and stalking offenses, are prohibited under NCCU's Sexual Harassment Policy (NCCU POL 01.04.2). NCCU faculty and instructors are considered to be mandatory reporters and are required to promptly report information regarding sexual harassment to the University's Title IX Coordinator. The Sexual Harassment Policy can be accessed through NCCU's Policies, Regulations and Rules website at [www.nccu.edu/policies](http://www.nccu.edu/policies). Any individual may report a violation of the Sexual Harassment Policy (including a third-party or anonymous report) by contacting the Title IX Coordinator at (919) 530-7944 or [TitleIX@nccu.edu](mailto:TitleIX@nccu.edu), or submitting the online form through the Title IX Reporting Form, located at [www.nccu.edu/titleix](http://www.nccu.edu/titleix).

### **Other Campus Programs, Services, Activities, and Resources**

- 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, Suite 208 (919) 530-7492, [studentadvocacy@nccu.edu](mailto: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, 2<sup>nd</sup> Floor, (919) 530-7646, [counseling@nccu.edu](mailto:counseling@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](mailto: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.