

EDCEP 816 A (10702): Research Methods in Education

Fall 2023

Credit Hours: 3 GR

Instructor Information

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Virtual office hours: By appointments. If you have any questions or concerns, I'll be happy to talk to you. Please email me to schedule a date and time convenient to both of us and we can meet through a virtual Zoom meeting. My zoom link is <https://ksu.zoom.us/j/93011973874>.

Technology problems or questions (e.g., Canvas, Zoom) are best directed to the K-State IT Help desk at: (785) 532-7722; (800) 865-6143; helpdesk@k-state.edu.

College of Education Vision, Mission, and Conceptual Framework Statements

Vision

"Preparing educators to be knowledgeable, ethical, caring decision makers for a diverse and changing world."

Mission

Our mission is fulfilled through:

- the delivery of exemplary instruction to students at the undergraduate and graduate levels;
- production, interpretation, and dissemination of sound and useful research and scholarship;
- leadership, collaboration, and service within the profession; and
- promotion, understanding, and celebration of diversity.

Conceptual Framework

The Conceptual Framework serves as the guide for fulfilling our vision of preparing educators to be knowledgeable, ethical, caring decision makers for a diverse and changing world. The College of Education strives to address three major areas in preparing the teachers of tomorrow: general education, content area studies, and professional studies.

The Conceptual Framework organizes 10 *standards* in professional studies into the following four categories (COE CF 1-10):

- *The Learner and Learning*
- *Content Knowledge*

- *Instructional Practice*
- *Professional Responsibility*

The Conceptual Framework also includes the following **dispositions** (COE CF 11-15):

- *Values Learning and Professional Development*: Dedicated to acquiring and applying new ideas about content, pedagogy, and students.
- *Commits to Professional, Ethical, and Legal Conduct*: Committed to obeying the law and abiding by institutional, state, and national professional and ethical standards.
- *Values Positive, Caring, and Respectful Relationships*: Committed to interacting with students, colleagues, and community members with care, compassion, and respect.
- *Embraces Diversity, Equity, and Fairness*: Recognizes and values human differences and is committed to meet the educational needs of all students.
- *Commits to Wise and Reflective Practice*: Dedicated to careful reflection on instructional decisions and takes actions to improve professional competence.

Course Description

This course is designed to provide students with an overview of quantitative, qualitative, and mixed research methods in education and to equip them with the knowledge to be competent consumers and producers of educational research.

Course Objectives and Outcomes

This course, *Research Methods in Education*, as a key part of an approved program in the College of Education, relates specifically to the vision, mission and CF of the College of Education. This course meets the competencies and objectives for Council for Accreditation of Counseling and Related Educational Programs (CACREP) accreditation.

- Understand and comply with the federal laws and regulations for conducting research involving human subjects (COE CF 2, 4, 5, 9, 12; CACREP 2.F.8.j.)*
- Recognize and explain various forms of research methods (quantitative, qualitative, and mixed) and corresponding procedures of each method in education (COE CF 4, 5, 6, 15; CACREP 2.F.8.f-h)
- Differentiate “good” from “bad” research that appears in academic journals and other media (COE CF 4, 5, 6, 15; CACREP 2.F.8.j.)
- Become familiar with the resources of the library and online databases and conduct index-driven search for scholarly sources (COE CF 1, 3, 4, 7, 10, 11)
- Synthesize results from the literature and draw inference for future research and practice (COE CF 4, 5, 6, 9, 12, 14, 15; CACREP 2.F.8.j.)
- Make proper decisions regarding appropriate designs and methods for investigating different research questions (COE CF 1, 2, 5, 6, 8, 9, 11, 12, 14, 15; CACREP 2.F.8.h.)

*COE CF: *College of Education Conceptual Framework*; CACREP: *CACREP Assessment Standards*.

Professional Statement for Students in School Counseling/Counselor Education and Supervision Programs

According to 20/20: A Vision for the Future of Counseling, (ACA, 2022), the definition of counseling is: “*a professional relationship that empowers diverse individuals, families, and groups to accomplish mental health, wellness, education, and career goals.*”

As a counselor-in-training you have embarked upon a challenging journey to develop yourself into a professional counselor. This is an occupation that requires a professional commitment unlike any other; it requires strong professional identity, leadership and advocacy for all people and populations, and critical attention to life and death issues.

Counselor development is accomplished through basic course content, sound counseling skills, and opportunities to demonstrate professional, ethical, and legal awareness. Opportunities to demonstrate self-awareness through self-reflection are required throughout your program and career.

As a counselor-in-training, your job is to grow, learn, and demonstrate appropriate professional dispositions, including personal self-awareness and wellness that allows you to best serve your clients and/or students with nonmaleficence and beneficence.

Comprehensive Poster Project for M.S. Students in CSD Program

The culminating experience for the M.S. in College Student Development program consists of a comprehensive poster project. The topic for this project should be approved by the student’s major professor before the student proceeds with it. Ideally, students will begin gathering information for their project during their first semester in the program and will continue to do so as they move through the required coursework. The project will be completed and presented about midway through the student’s last semester in the program. Throughout this semester, you are encouraged to identify resources from this course that you might use in your comprehensive poster project and to save them in a location where you can find them when you are ready to use them (e.g., digital file folder).

Textbooks and Materials

Required:

Johnson, B. & Christensen, L. *Educational research: Quantitative, qualitative, and mixed approaches*. Thousand Oaks, CA: Sage. ISBN: 9781483391601 or 9781544337838.

Note: Either the 6th or 7th edition will work for this course. All the readings are listed by section titles.

Strongly recommended:

American Psychological Association. (2019). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC.

Suggested Readings:

Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2014). *Introduction to research in Education* (9th ed.). Belmont, CA: Thompson-Wadsworth.

Tashakkori, A., & Teddlie, C. (Eds.). (2010). *Handbook of mixed methods in social and behavioral research* (2nd ed.). Thousand Oaks, CA: Sage.

Johnson & Christensen textbook has been added to Course Reserves at the new Library Help Desk. It is available for 2-hour loan periods to students. Here is the link to Course Reserve:

https://k-state.primo.exlibrisgroup.com/discovery/search?vid=01KSU_INST:NewUI&sortby=rank&search_scope=CourseReserves

Student Resources Website: You are encouraged to visit the Student Resources Website from Sage Publications (6th or 7th ed. link below): <https://edge.sagepub.com/johnson6e/student-resources> or <https://edge.sagepub.com/rbjohnson7e/student-resources-0> . You will find many additional study resources that were developed to help you learn the materials better.

K-State library Education Research webpage: <http://guides.lib.k-state.edu/edgrad> . Educational librarian Laura Bonella from K-State Hale library has created a webpage on educational research. It provides valuable guide and resources to help you with index-driven searches for scholarly sources, literature review, etc.

K-State Email account: All correspondence for the course will be sent to your K-State email account. You can access your KSU e-mail through the K-State homepage. **Please be aware that if you forward your email to another account, the K-State system blocks emails sent to some accounts, especially hotmail and yahoo accounts, so use your K-State account directly.** Make sure you check your K-State email on a regular basis. This is the only email I will send out course-related information.

Methods of Instruction

The class meets on-site every Monday between 4:30 – 6:55pm in Bluemont Hall Room 217. This course will incorporate many forms of delivery, which include, but are not limited to: reading, discussion, small and total group activities, written assignments, and guest lecturers.

Course Assignments

Critique Paper (4)	30%
Assignments (6)	20%
Knowledge checks (4)	50%
Total	100%

Graduate School Grading Scale: A: 100-90; B: <90 – 80; C: <80 – 70; F: <70

Critique Paper (30%)

Your understanding of the materials will be assessed through your ability to critically evaluate published research on a given topic. In this class, you are expected to reflect upon and evaluate four empirical research articles (two quantitative and two qualitative) by applying the materials in the course. You can choose the articles from the list provided. Equally important, this is a foundational research class where you will learn the guidelines of academic writing in our discipline, i.e., American Psychological Association (APA) style 7th edition. Your work will be evaluated on (a) the accuracy of using APA7 style, and (b) the quality of your evaluation. More details will be provided in Canvas. The deadlines of Critique Papers are listed at the end of the syllabus. Please notify me as soon as possible if you have emergencies or illnesses. (COE CF 1, 2, 4, 5, 6, 7, 9, 11, 15; Core 7c-e, 8a-e. SC h2-3, i1, i3, j1-3)

Grading policy: You have the option to submit a draft version for review at least seven days before the deadlines of Critique Papers (both Quantitative and Qualitative). After the submission deadlines, no revise and resubmit is allowed. Please see “Critique Paper Instruction” in Canvas for the key dates.

Assignments (20%)

Most individual assignments will be applied practices to assess your understanding of conceptual issues covered in class. You are expected to complete the assignments on your own. If you have questions or concerns about assignments, I encourage you to ask as soon as possible. But the products should reflect your own work. The homework assignments need to be typed or written clearly. The deadlines of assignments are listed at the end of the syllabus. Please notify me as soon as possible if you have emergencies or illnesses. (COE CF 1-10, 13, 14; Core 7g, 8b, 8f. SC h2, j2-3)

Grading policy: If there are gaps in your submissions, you have the option to revise and resubmit. I strongly encourage you to take advantage of it, which could improve your grades.

Knowledge Checks (40%)

Your understanding of the materials will also be evaluated through knowledge checks. There are four timed knowledge checks throughout the semester that you will complete to demonstrate your understanding of core research concepts and applications. Knowledge checks will mostly consist of multiple-choice and true/false questions. All knowledge checks are open-book, open-notes. But you cannot use Internet resources (e.g., artificial intelligence programs such as ChatGPT, search engines, discussion boards, social media sites, private messengers, texts, etc.). You must complete it on your own. Please only take the knowledge checks on a computer, NOT a tablet or a phone. The dates of the knowledge checks are listed at the end of the syllabus. Please notify me as soon as possible if you have emergencies or illnesses (which requires appropriate paperwork).

I will provide ungraded sample questions before each knowledge check. These sample questions cover some key concepts and materials from the class. They serve three purposes: a) to give you the opportunity to evaluate your own learning; b) to help you become familiar with the types of items in the knowledge checks; and (c) to provide formative feedback to me about student

learning, so I can make needed modifications. (COE CF 1, 2, 5, 8, 9, 11, 13-15; Core 7c-g, 8a-f. SC h2-4, i1, i3, j1-3)

Grading policy: All knowledge checks are final. No revise and resubmit is allowed.

Extra credit. There are no opportunities for extra credit in this class. Instead, you should be actively involved in the class from day one, contact me if you are having questions, make use of learning materials, the on-demand virtual office hours, and opportunities to revise and resubmit, and other tools to help you learn.

Counseling Program Key Performance Indicator(s)

KPI 10- K	Student is able to demonstrate knowledge of statistical concepts including scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, and correlations	Knowledge Checks 2 & 3
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Course Policies

Academic Honesty

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the [Honor and Integrity System](#) apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "**On my honor, as a student, I have neither given nor received unauthorized aid on this academic work.**" A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

Students with Disabilities

At K-State it is important that every student has access to course content and the means to demonstrate course mastery. Students with disabilities may benefit from services including accommodations provided by the Student Access Center. Disabilities can include physical, learning, executive functions, and mental health. You may register at the [Student Access Center](#) or to learn more contact:

Manhattan/Olathe/Global Campus – Student Access Center
accesscenter@k-state.edu

785-532-6441

K-State Salina Campus – Julie Rowe; Student Success Coordinator

jarowe@k-state.edu

785-820-7908

Students already registered with the Student Access Center please request your Letters of Accommodation early in the semester to provide adequate time to arrange your approved academic accommodations. Once SAC approves your Letter of Accommodation it will be e-mailed to you, and your instructor(s) for this course. Please follow up with your instructor to discuss how best to implement the approved accommodations.

Expectations for Classroom Conduct

All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

Mutual Respect and Inclusion in K-State Teaching and Learning Spaces

At K-State, faculty and staff are committed to creating and maintaining an inclusive and supportive learning environment for students from diverse backgrounds and perspectives. K-State courses, labs, and other virtual and physical learning spaces promote equitable opportunity to learn, participate, contribute, and succeed, regardless of age, race, color, ethnicity, nationality, genetic information, ancestry, disability, socioeconomic status, military or veteran status, immigration status, Indigenous identity, gender identity, gender expression, sexuality, religion, culture, as well as other social identities.

Faculty and staff are committed to promoting equity and believe the success of an inclusive learning environment relies on the participation, support, and understanding of all students. Students are encouraged to share their views and lived experiences as they relate to the course or their course experience, while recognizing they are doing so in a learning environment in which all are expected to engage with respect to honor the rights, safety, and dignity of others in keeping with the K-State [Principles of Community](#).

If you feel uncomfortable because of comments or behavior encountered in this class, you may bring it to the attention of your instructor, advisors, and/or mentors. If you have questions about how to proceed with a confidential process to resolve concerns, please contact the [Student Ombudsperson Office](#). Violations of the [student code of conduct](#) can be reported using the [Code of Conduct Reporting Form](#). You can also report [discrimination, harassment or sexual harassment](#), if needed.

Discrimination, Harassment, and Sexual Harassment

Kansas State University is committed to maintaining academic, housing, and work environments that are free of discrimination, harassment, and sexual harassment. Instructors support the University's commitment by creating a safe learning environment during this course, free of conduct that would interfere with your academic opportunities. Instructors also have a [duty to report](#) any behavior they become aware of that potentially violates the University's policy prohibiting discrimination, harassment, and sexual harassment, as outlined by [PPM 3010](#).

If a student is subjected to discrimination, harassment, or sexual harassment, they are encouraged to make a non-confidential report to the University's [Office for Institutional Equity \(OIE\)](#) using the [online reporting form](#). Incident disclosure is not required to receive resources at K-State. Reports that include domestic and dating violence, sexual assault, or stalking, should be considered for reporting by the complainant to the [Kansas State University Police Department](#) or the [Riley County Police Department](#). Reports made to law enforcement are separate from reports made to OIE. A complainant can choose to report to one or both entities. Confidential support and advocacy can be found with the [K-State Center for Advocacy, Response, and Education \(CARE\)](#). Confidential mental health services can be found with [Lafene Counseling and Psychological Services \(CAPS\)](#). Academic support can be found with the [Office of Student Life \(OSL\)](#). OSL is a non-confidential resource. OIE also provides a [comprehensive list of resources](#) on their website. If you have questions about non-confidential and confidential resources, please contact OIE at equity@ksu.edu or (785) 532-6220.

Student Resources

K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others. Check out the [Student Guide to Help and Resources: One Stop Shop](#) for more information.

Mental Health

Your mental health and good relationships are vital to your overall well-being. Symptoms of mental health issues may include excessive sadness or worry, thoughts of death or self-harm, inability to concentrate, lack of motivation, or substance abuse. Although problems can occur anytime for anyone, you should pay extra attention to your mental health if you are feeling academic or financial stress, discrimination, or have experienced a traumatic event, such as loss of a friend or family member, sexual assault or other physical or emotional abuse.

If you are struggling with these issues, do not wait to seek assistance.

Kansas State University [Counseling and Psychological Services](#) offers free and confidential services to assist you to meet these challenges.

[Lafene Health Center](#) has specialized nurse practitioners to assist with mental health.

The [Office of Student Life](#) can direct you to additional resources.

[K-State Family Center](#) offers individual, couple, and family counseling services on a sliding fee scale.

[Center for Advocacy, Response, and Education \(CARE\)](#) provides free and confidential assistance for those in our K-State community who have been victimized by violence.

Technical Knowledge and Resources

Certain technical skills are required for learner success in this course. Instructions on how to access technology assistance (e.g., [IT Help Desk](#), [Canvas Help](#), [Media Development Center](#), [K-State Libraries](#), and many more) can be found at <http://global.k-state.edu/students/> . Learner usage of student services such as [Getting Started](#), [Resources for Success](#) is provided through K-State Global Campus and [Student Life](#). Please also be aware of online security and computer safety in alignment with [K-State IT Security policies](#) .

Other resources provided include:

Support for learner usage of [Student Services](#) provided through K-State Global Campus:

- [Getting Started](#)
- [Resources for Success](#)

Support for learner usage of student services provided by K-State:

- [Student Life](#)
- [K-State Library resources and services](#)
- [Career Center](#) (as needed)
- [Counseling Services](#) (as needed)
- [Student Access Center](#)

Campus Safety

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. Current Campus Emergency Information is available at the [University's Advisory](#) webpage.

Copyright Notification

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Academic Freedom

Kansas State University is a community of students, faculty, and staff who work together to discover new knowledge, create new ideas, and share the results of their scholarly inquiry with

the wider public. Although new ideas or research results may be controversial or challenge established views, the health and growth of any society requires frank intellectual exchange. Academic freedom protects this type of free exchange and is thus essential to any university's mission.

Moreover, academic freedom supports collaborative work in the pursuit of truth and the dissemination of knowledge in an environment of inquiry, respectful debate, and professionalism. Academic freedom is not limited to the classroom or to scientific and scholarly research, but extends to the life of the university as well as to larger social and political questions. It is the right and responsibility of the university community to engage with such issues.

Temporary Course Schedule (Subject to change)

Weekly Topics (including the chapter number in Johnson & Christensen textbook 7th edition and the title of a specific section in that chapter) – **This should be done prior to class.**

Week 1 (08/21)

Chapter 1

- Sources of Knowledge
- The scientific approach to knowledge generation

Chapter 2

- Characteristics of the three research paradigms
- Variables

CACREP Standards 2.F.8.f.

Week 2 (08/28)

Chapter 4

- Review of the literature
- Statement of the purpose of the study
- Statement of research questions
- Formulating hypothesis
- Consumer use of the literature

Chapter 19

- Null Hypothesis & Alternative Hypothesis – This ties to Chapter 4 “Formulating hypothesis” section

CACREP Standards 2.F.8.f.

Week 3 (09/04)

Labor Day Holiday. No Class.

Assignment 1 (Quantitative Research Question & Hypothesis) & Assignment 2 (Qualitative Research Question) due by Sunday, 09/10 @ 11:59 pm CST

Week 4 (09/11)

Chapter 5

- Strategies for writing each section of the research proposal

Chapter 6 Research Ethics

- The entire chapter

Chapter 10

- Terminology used in sampling
- Random sampling techniques (skip “Probability proportional to size” section under “Two-Stage Cluster Sampling”)
- Nonrandom sampling techniques
- Random selection and random assignment
- Determine the sample size when random sampling is used

CACREP Standards 2.F.8.j.

Week 5 (09/18)

Chapter 10 Continued

Chapter 8 Methods of Data Collection (Note: This is Chapter 9 in the 6th edition)

Tests

Questionnaires

Assignment 3 (IRB Training) due by Sunday, 09/24 @ 11:59 pm CST**Week 6 (09/25)****Knowledge check 1****Assignment 4 (Quantitative Sampling) due by Sunday, 10/01 @ 11:59 pm CST****Week 7 (10/02)**

Chapter 7 Standardized Measurement & Assessment

The entire chapter

Chapter 9 How to Construct a Questionnaire (Note: This is Chapter 8 in the 6th edition)

The entire chapter

CACREP Standards 2.F.8.h.**Week 8 (10/09)**

Chapter 11

Validity issues in the design of quantitative research

Internal validity (skip "Regression artifacts" and "Selection-regression effect" sections)

External validity

Construct validity

Week 9 (10/16)

Chapter 12

The experiment

Independent variable manipulation

Control of confounding variables (skip "Analysis of covariance" section)

Experimental research designs (skip "Factorial designs based on a mixed model" section)

Week 10 (10/23)**Knowledge check 2****Week 11 (10/30)**

Chapter 13

Nonequivalent Comparison Group Design

Interrupted Time-Series Design

Week 12 (11/06)

Chapter 14

Steps in nonexperimental research

Independent variables in nonexperimental research
Simple cases of nonexperimental quantitative research
Three required conditions for cause-and-effect relationships
Applying the three required conditions for causation in nonexperimental research
Techniques of control in nonexperimental research (skip “Statistical control” section)
The time dimension in nonexperimental research (skip “Retrospective research” section)
The research objective dimension in nonexperimental research - Explanatory
nonexperimental research

Week 13 (11/13)

Knowledge check 3

Assignment 5 due by Sunday, 11/19 @ 11:59 pm CST

Critique Paper: Two Quantitative critique papers due by Sunday, 11/19 @ 11:59 pm CST

Week 14 (11/20)

Fall Break. No class. Happy Thanksgiving!

Week 15 (11/27)

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), 837-851. (Tracy article will be provided in Canvas)

Chapter 9 Methods of Data Collection (Note: This is Chapter 8 in the 6th edition)

Interviews

Focus groups

Observations

Chapter 10

Sampling in qualitative research

Chapter 11

Research validity in qualitative research

Week 16 (12/04)

Chapter 15 Narrative Inquiry & Case Study

The entire chapter

Chapter 16 Phenomenology, Ethnography, and Grounded Theory

The entire chapter

Assignment 6 (Qualitative Research Method) due by Sunday, 12/10 @ 11:59 pm CST

Critique Paper: Two Qualitative critique papers due by Sunday, 12/10 @ 11:59 pm CST

Week 17 (12/11)

Knowledge check 4