



THE UNIVERSITY OF TEXAS AT
EL PASO

College of Education
Educational Psychology and Special
Services

**EDPC 5310: Applied Research Design for
Educators**

Contact Information:

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Office Hours: Monday 10:00 – 11:30; Wednesday 10:00 – 11:30 ONLINE; or by appointment
Office Phone: (915) 747-7639 (NOTE: If you call and I don't answer, please leave a message. I will receive an email with a recording of your message, so if I am working at home I will still receive your message.)

Textbook Information:

Required Text: Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2014). *How to Design and Evaluate Research in Education* (9th ed.). New York: McGraw-Hill.
(International version is cheaper and has the same content)
Recommended Text: American Psychological Association (2010). *Publication Manual of the American Psychological Association* (6th ed.). Washington, D.C.: American Psychological Association.
Supplemental Readings: Research articles to be assigned (TBA)

Course Overview

This course introduces students to research methods used in educational and community settings that serve diverse populations. Emphasis will be placed on understanding the nature of research, the research process, and various quantitative and qualitative research methodologies so that students can read, use and design research to address educational and community problems and program needs.

Course Objectives

Objective	Standard CACREP	TXES School Counselor	Learning Activity	Outcome Measure
Goal: Section II F. 8. The goal is for students to develop skills in conducting and using research to inform evidence-based counseling practice.				
Objective 1. Understand the importance of research in advancing the counseling profession, including its use to inform evidence-based practice.	F 8a	Domain II: Competency 6.6 Domain III: Competency 10.4, 10.5	Classroom lectures, online tutorials, reading, group discussions	Research Project Parts 1 - 3
Objective 2. Identify and describe counseling-related educational problems	8 a	Domain II: Competency 6.6	Classroom lectures, reading, group discussions	Research Project Part 1
Objective 3. Formulate educational research questions	8a	Domain II: Competency 6.6. Domain III: 10.5	Classroom lectures, reading, group discussions, Research Project Part 1	Research Project Part 1
Objective 4. Understand the steps of planning and conducting a counseling-related research study	8a	Domain II: Competency 6.6, Domain III: 10.5	Classroom lectures and activities, online tutorials, reading, group discussions, Research Project Parts 1 - 3	Research Project Parts 1 - 3
Objective 5. Conduct a literature review in order to identify and review credible sources informing a counseling problem	8a	Domain II: Competency 6.6, Domain III: 10.5	Classroom lectures, reading, group discussions, Research Project Part 1	Research Project Part 1
Objective 6. Understand and identify the types and roles of variables, hypotheses, and sampling procedures in educational research	8a	Domain II: Competency 6.6, Domain III: 10.5	Classroom lectures, online tutorials, reading, group discussions, Research Project Part 1	Mid-term exam, Research Project Part 1

Objective 7. Understand qualitative, quantitative and mixed research methods and designs and when they are used	8 e, f	Domain II: Competency 6.6, Domain III: 10.5	Classroom lectures, online tutorials, reading, group discussions, Research Project Parts 1 - 3	Mid-term and final exams
Objective 8. Understand basic statistical methods used in counseling research	8 g	Domain II: Competency 6.6, Domain III: 10.5	Classroom lectures and activities, online tutorials, reading, group discussions	Mid-term exam
Objective 9. Analyze basic statistical data and results in counseling research	8 h	Domain II: Competency 6.6, Domain III: 10.5	Classroom lectures and activities, reading, group discussions, Statistics Worksheet	Research project, mid-term and final exams
Objective 10. Understand ethical issues and practices in conducting, interpreting, and reporting results of research in counseling	8 i	Domain III: Competency 10.5	Lectures, reading, CITI human subjects training, group discussions, Research Project Part 3	CITI training; Research Project Part 3
Goal: Section II F. 7 The goal is for students to understand and assess the reliability and validity of measurements used in educational research.				
11. Explain the importance of validity, reliability, and scales of measurement in reading and conducting educational research	7 f h	Domain II: Competency 7,3	Classroom lectures, reading, online tutorial, group discussions, Research Project Part 2	Mid-term exam, Research Project Part 2

Expectations

Because this is a graduate course of study leading to an advanced academic degree, I have high expectations for you. Likewise, you should have high expectations for me. Our behavior in the class reflects our professional attitudes about education as a profession. This class will be taught in a hybrid format, so these expectations include behavior both in class and online.

I expect the following of students:

- Time management. This is a time-intensive and content-intensive class. The rule of thumb for studying in graduate courses is approximately three (3) hours for every credit hour taken. This is a standard figure recommended for graduate school by American universities. This means that for every hour we meet on campus, you should expect to devote up to 3 hours out of class to

written assignments and preparing for class. You may not always need to devote this amount of time but you should be prepared to do so if necessary to be successful in this class.

- Regular attendance at on-campus classes. Much of our learning will be done in the interactive, collaborative setting of the class. If someone is not here, it affects the learning of everyone in the class. If you must miss class due to professional reasons, please provide documentation ahead of time. If you know ahead of time that you must miss more than one class due to professional or personal reasons, you should plan to take the class in a subsequent semester. If you must miss class due to unexpected emergencies, please notify the instructor with documentation as soon as possible.
- Careful preparation for class. Because our time together is limited, it is essential that you come to class prepared. This means that you should read and reflect on assigned materials before class in order to be thoroughly prepared to discuss them. Again, if someone is not prepared, it affects the learning of everyone in the class. You will be required to complete practice quizzes on assigned chapters by the evening before we meet in class. Details on requirements are provided in the course timeline and course modules.
- Bring textbook and research articles to every class. In-class activities require having these available in order to actively participate; therefore they are a part of attendance and participation. *If you are unable to print or download assigned articles to a hand-held device, please notify the instructor in advance and I will make a copy available.*
- Active participation in face-to-face and online activities based on thorough preparation, thoughtful contributions, and respectful support of your colleagues' learning.
- Make regular use of the Blackboard site for this class as it will be our primary means of communication outside of class, and for learning when we are online. You should plan to check Blackboard several times weekly for announcements and Blackboard emails.
- On-time completion and submission of all assigned activities and assignments.
- Assignments will be submitted electronically through Blackboard before the due dates. Late assignments will be penalized one letter grade for each day they are late, unless prior arrangements have been made with the instructor. In order to make sure that you receive credit, it is strongly recommended that you not wait until the last minute to submit assignments through Blackboard in case it goes down or you lose power unexpectedly. In the unlikely event that Blackboard is down when you are submitting an assignment, you should send it to me as an attachment via UTEP email. However, you are still required to submit it through Blackboard when it becomes available.

Students should expect the following of me:

- Careful and thorough planning and preparation in support of your learning for classes and online activities.

- Feedback on assignments will usually be returned to you within one week of due date, barring unforeseen circumstances.
- Timely out-of-class communication, which will usually consist of Blackboard email correspondence since it is the most efficient and convenient method of communication. I will make every effort to respond to messages 2-4 times daily on Monday through Friday and within 24 hours on weekends. I will also be available for office hours and for personal and phone conferences by appointment. Use UTEP email only if Blackboard is down. If you call my office, please leave a voicemail message. It will get transcribed and sent to me as an email message via UTEP email, so I will get it even if I am working at home.
- Modeling effective teaching practices and professionalism.

Course Requirements

Attendance and Participation

I expect each of you to make every effort to attend all class meetings and participate actively in learning activities. Attendance and participation include the following: arriving to class on time, staying for the entire class, reading assigned chapters in the textbook and research articles before coming to class, bringing textbook and research articles to class, and actively participating in learning activities. Lack of any of these elements of attendance and participation without making prior arrangements will constitute an unexcused absence. I acknowledge that your obligation to this class will be superimposed on family and professional responsibilities. However, absence, lack of punctuality, or lack of preparation, does not excuse any of us from our obligations to our own learning and to the learning of others. Completion of this course constitutes partial fulfillment of the requirements for an advanced academic degree and professional certification/licensing. I expect that absence, late arrival, or early departure will be handled professionally. As a professional courtesy, the instructor should be contacted before class whenever possible. Attendance, active participation, and completion of in-class activities will be credited 5 points per class.

Practice Quizzes

For most chapters in the textbook, there will be one to three practice quizzes on Blackboard. These are optional but highly recommended. Completion of the quizzes will help you check your comprehension for our exams and help you practice for comprehensive and professional licensing exams. Completion of practice quizzes before discussing the chapters in class will also be taken into consideration in the event of a borderline grade. You will see your scores on these quizzes in your Blackboard grade center but they are not part of your calculated grade. If you have questions as you complete the quizzes, please bring them to class so we can discuss and clarify concepts.

Learning Modules

For most of the chapters in the textbook, I have prepared learning modules to facilitate your

learning. These modules include a summary of the most important topics in each chapter, offer examples of research concepts, and include YouTube videos to illustrate many of the important concepts. Although the modules do not include required assignments or quizzes, it is strongly recommended that you take advantage of these learning materials to help supplement your learning in the course. Please note that they do not replace reading the chapters which contain more detailed information.

Research Project (Parts 1, 2, and 3)

Because this course fulfills requirements leading to a professional degree in counseling, the written assignments are designed to give you authentic experiences in planning major phases of reading and designing educational research. They are sequenced to walk you through important steps of the research process leading up to designing a research study on an educational problem of interest to you. Each assignment is worth 40 points and will be graded using rubrics that spell out point values for each component of the assignment. In order to be as authentic as possible, you will have the option to complete these individually or in groups of no more than four members, since research is nearly always, but not necessarily, a collaborative enterprise. Parts 1 and 2 can be revised based on my feedback to earn back points. Please be sure to follow the instructions in the assignment when making revisions.

Exams

In addition to written assignments, there will be two open book online exams worth 50 points each. These exams are designed to assess your ability to understand and apply important research concepts and to help you prepare for comprehensive and professional licensing exams. In addition to the exams, you will complete five selected modules from the CITI IRB training for ethics in research and protection of human subjects. There is one brief quiz for each IRB module, for a total of 20 points. Performance on the IRB quizzes will be documented by submitting a screen capture of the modules completed, including the quiz scores and your name. These IRB quizzes may be retaken to improve your score, but the documentation for completion must be submitted by the due date. It is recommended, therefore, that you complete this training early so that you may retake the quizzes if you choose.

Following is a listing of the course requirements and point values:

Assignment	Points Possible
Introductory Tasks	5
Research Questionnaires (pre and post)	15
Research Project Part 1	40
Research Project Part 2	40
Research Project Part 3	40
IRB training (documented with screen capture of module completion)	20
Exams (2 @ 50 points each)	100
<u>Attendance/Participation (8 classes @ 5 points each)</u>	<u>40</u>
Total Points	300

Grading rubrics will be provided for each required written assignment. Letter grades will be assigned using the following scale:

- A = 90% to 100%
- B = 80% to 89%
- C = 70% to 79%
- D = 60% to 69%
- F = 59% and below

IMPORTANT NOTE ABOUT GRADES: You will be able to see your accumulated points and percentage in Blackboard. However, it is the responsibility of each student to monitor your own grades and bring any concerns to the attention of the instructor. Unfortunately there are occasional glitches in the grade center in Blackboard, but I can only correct them if I am made aware of them. It is also the responsibility of the student to contact the instructor if there are concerns about performance in the class. This must be done early enough in the course so that a plan for improvement can be put into place. If you wait until the end of the course, it is too late. Although there will be occasional opportunities during the class for all students to earn extra credit points, no such opportunity will be offered to individual students at any time.

Students with Disabilities

The university is committed to the principle that in no aspect of its programs shall there be differences in the treatment of persons because of race, creed, national origin, age, sex, or disability, and that equal opportunity and access to facilities shall be available to all. If you require special accommodations, please provide documentation to the Center for Accommodations and Support Services (CASS).

UTEP Policy on Academic Integrity

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another person's as ones' own. And, collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. Violations will be taken seriously and will be referred to the Dean of Students Office for possible disciplinary action. Students may be suspended or expelled from UTEP for such actions.

Academic dishonesty is an assault upon the basic integrity and meaning of a University. Cheating, plagiarism, and collusion in dishonest activities are serious acts which erode the University's educational and research roles and cheapen the learning experience not only for the perpetrators, but also for the entire community. It is expected that UTEP students will understand and subscribe to the ideal of academic integrity and that they will be willing to bear individual responsibility for their work. Materials (written or otherwise) submitted to fulfill

academic requirements must represent a student's own efforts. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. Violations will be referred to the Dean of Students Office for possible disciplinary action. Students may be suspended or expelled from UTEP for such actions.

Tentative Course Schedule

Course Weeks	Important Due Dates and Deadlines		Classes
	Complete on or before:	Task:	Class topics/activities:
Preparation Week Monday 6/5 thru Sunday 6/11	Monday 6/12 at noon	Complete introductory tasks in Blackboard Submit completed research questionnaires in BB Read: Ch. 1- 2, 5-6; skim Ch. 3 (specific pages indicated in BB) Complete learning modules in preparation for class on 6/12 Recommended: Complete practice quizzes for Ch. 1-2, 5-6	
Week 1: Monday 6/12 thru Sunday 6/18	Class on campus Monday 6/12		What is educational research? Basics of Research, Part 1: Planning research and selecting a research problem Basics of Research, Part 2: Searching for research literature Basics of Research, Part 3: Variables, hypotheses, and sampling
	Wednesday 6/14 Noon	Read Research Article 1 in preparation for class Read Ch. 7 – 12 and complete learning modules in preparation for class Optional: Complete practice quizzes for Ch. 8 - 12	

	Class on campus Wednesday 6/14		Article Discussion 1 (Experimental/quasi-experimental) Research Project Part 1 Intro to Basics of Research, Part 4: Measuring Variables in Educational Research <ul style="list-style-type: none"> • Validity and reliability of measures • Scales of measurement • Internal validity
Week 2 Monday 6/19 thru Sunday 6/25	Class on campus Monday 6/19	Review Ch. 7-12	Basics of Research, Part 4, cont.: Measuring Variables in Educational Research <ul style="list-style-type: none"> • Validity and reliability of measures • Scales of measurement Internal validity Basics of Research, Part 5: Statistical concepts for quantitative research <ul style="list-style-type: none"> • Descriptive statistics: Measures of central tendency and measures of variability – <i>Means and standard deviations</i> • Inferential statistics and hypothesis testing: <i>t-tests, ANOVA, chi-square tests</i>
	Tuesday 6/20 11:59 PM	Research Project Part 1 due	
	Class on campus Wednesday 6/21		Statistics Worksheet Review for Midterm Research Project Part 2
	Friday 6/23 11:59 PM	Midterm Exam due	

Week 3 Monday 6/26 thru 7/2	Monday 6/26 noon	Read Ch. 13 – 16 and complete learning modules in preparation for class on 6/26 Optional: Complete practice quizzes for Ch. 13 - 16	
	Class on campus Monday 6/26		Research methods 1: Quantitative research – experimental, single subject, correlational and causal comparative
	Wednesday 6/28 Noon	Read Research Article 2 in preparation for class; Review chapters 13 - 16	
	Class on campus Wednesday 6/28		Article Discussion 2 (Single subject research) Research Project Part 2
	Friday 6/20 11:59 PM	Research Project Part 2 due	
Week 4 Monday 7/3 thru Sunday 7/9	Monday 7/3 Noon	Read Ch. 18 – 19, 23-24 and complete learning modules in preparation for class on 7/3 Optional: Complete practice quizzes for Ch. 18 – 19, 23 - 24	
	Class on campus Monday 7/3		Research methods 2: Qualitative research – observation and interviewing Research methods 3: Mixed methods and action research Basics of Research Part 5: Ethics in human research
	Wednesday 7/5 Noon	Read Research Article 3 in preparation for class; review chapters 18-19, 23-24	
	Class on campus Wednesday 7/5		Research Article 3 (Qualitative) Ethics in Research Research Project Part 3

Follow-up Week Monday 7/10 thru Friday 7/14	Monday 7/10 11:59 PM	Complete required IRB CITI training modules and submit screen capture of completion through BB	
	Friday 7/14 11:59 PM	Exam 2 due	
	Friday 7/14 11:59 PM	Research Project Part 3 due	