

The University of Texas at Tyler
Department of Health and Kinesiology
Course Information
Fall 2025

Course Title: Research Methods and Analysis

Course Number: KINE 5301

Course Structure & Meeting Times

Date: 8 / 26 / 2025 – 12 / 4 / 2025

Days and Times: Online

Wednesdays, 12:20-2:20pm

Lecture: Online

Instructor Information

Name and Title: Woohyoung Jeon, Ph.D., Assistant Professor of Health and Kinesiology

Office location: HPC 2245 (inside Lab at HPC 2235)

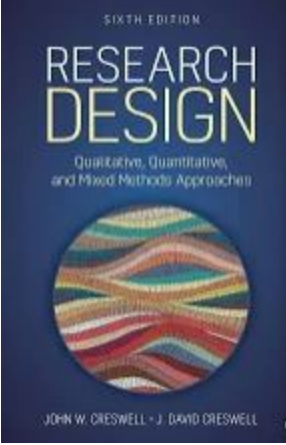
Email address: wjeon@uttyler.edu

Office hours: By appointment

Overview: This course offers an overview of research design, methodology and technique, and data analysis. Course objectives include:

- 1) Becoming familiar with the concepts, language, methods, and applications of research.
- 2) Developing the ability to formulate clear research questions.
- 3) Developing the ability to identify an appropriate research design to answer your research questions.
- 4) Learning how to frame the problem with the correct research methodology.
- 5) Learning statistical analysis methods.
- 6) Learning how to analyze data to extract insights that support decision-making.

Required Texts:

	<p><i>Research Design: Qualitative, Quantitative, and Mixed Methods Approaches</i> <i>Sixth (or Fifth) Edition by John Ward Creswell and John David Creswell</i></p> <p><i>*The textbook is necessary to take this course. It should be used to prepare for chapter quizzes and final test.</i></p> <p><i>*The tests will be on a lockdown browser (Respondus), so download and test the extension well before the exam date. If you're unfamiliar with Respondus, address any issues early—do not wait until the day of the exam to bring up this concern. <u>Your score will be "0" if you get flagged during the test.</u></i></p>
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Evaluation: Course Evaluation will be based on two exams covering lecture materials, completion of assignments, and a separate literature review on a topic chosen by the student.

1. Post Chapter Quizzes (50% of grade)
2. Research Proposal Writing (Group Project: 50% of grade)

Title Page (Topic)	
Introduction & Background	Background (literature review) Research Problem Objectives (Aims)
Significant and Impact	
Methods (Approach)	Research Design Participants Data Collection Data Analysis
Expected Outcome & Future Direction	

Post Chapter Quizzes (Quiz 1, 2, 3, 4, 5) <i>*You will take all the quizzes through a lockdown browser</i>	50 %
Research Proposal Writing Assignment (Introduction 25% + Methods 25% + Final draft 50%)	50 %
Total	100%

Final Grades:

Grading will be based on the following scale (**no round-off** calculation):

A	85% ≥	PASS
B	75% ≤ < 85%	
C	65% ≤ < 75%	
D	55% ≤ < 65%	FAIL
F	< 55%	

KINE 5301 Course Schedule

Date	Topic	Assignments
8/25 - 8/31	The Use of Theory: Quantitative	Textbook Reading: Chapter 3 – 1 Quantitative Theory Assignment: 1. Proposal Writing: Research question, research topic, and proposal title due Thursday, 8/28
9/1 - 9/7	The Use of Theory: Qualitative	Textbook Reading: Chapter 3 – 2: Qualitative Theory

		<p>Statistics Study: Independent vs. Dependent Variables</p> <p>Assignment:</p> <ol style="list-style-type: none"> 1. Post-Chapter Quiz 1 (Chapter 3: The Use of Theory) 2. Proposal Writing: Submit revised research question, research topic, and title of study — due Thursday, 9/4
9/8 - 9/14	<p>The Introduction Background of the proposed research</p>	<p>Textbook Reading: Chapter 5</p> <p>Statistics Study: Effect Size</p> <p>Assignment:</p> <ol style="list-style-type: none"> 1. Post-Chapter Quiz 2 (Chapter 5: The Introduction) 2. Proposal Writing: Introduction + Significance and Innovation — due Thursday, 9/11
9/15 - 9/21	<p>Proposal Writing Revision:</p> <ol style="list-style-type: none"> 1. Introduction 2. Significance and Innovation 	<p>Assignment:</p> <ol style="list-style-type: none"> 1. Submit revised Title, 1 Introduction, 2 Significance, and 3 Innovation — due Thursday, 9/18
9/22 - 9/28	<p>The Purpose Statement Study Aims</p>	<p>Textbook Reading: Chapter 6</p> <p>Statistics Study: Non-Parametric</p> <p>Assignment:</p> <ol style="list-style-type: none"> 1. Post-Chapter Quiz 3 (Chapter 6: The Purpose Statement) 2. Proposal Writing: Overall objective, hypothesis, and specific aims (the one summary paragraph before listing the specific aims)— due Thursday, 9/25
9/29 - 10/5	<p>Research Questions and Hypotheses How to narrow down the purpose statement to the predictions about what will be answered?</p>	<p>Textbook Reading: Chapter 7</p> <p>Statistics Study: Linear Regression</p> <p>Assignment:</p> <ol style="list-style-type: none"> 1. Post-Chapter Quiz 4 (Chapter 7: The Questions and Hypotheses) 2. Proposal Writing: Specific aims (two specific aims of your study)— due Thursday, 10/2

10/6 - 10/12	Proposal Writing: Introduction & Background + Research Questions & Hypotheses	Assignment: 1. Proposal Writing: Submit revised Overall objective, Hypothesis, and Specific Aims — due Thursday, 10/9
10/13 - 10/20	Statistical Analysis for Quantitative Research Design	Assignment: Proposal Writing: Justification and feasibility, experimental design, participants, and overview of methods (*step-by-step experimental process and *equipment for each measurement) — due Thursday, 10/16
10/21 - 11/9	Quantitative Methods: Measurement and Data Analysis Plan	Textbook Reading: Chapter 8 – 2 Statistics Study: ANOVA Assignment: 1. Post-Chapter Quiz 5 (Chapter 8: Quantitative Methods) 2. Proposal writing: Define primary outcomes (dependent variables) and the statistical analysis plan for each variable — due Thursday, 10/30
11/10 - 11/23	Proposal Writing: Methods	Assignment: 1. Proposal Writing: Submit revised Approach — due Thursday, 11/20
12/8	Proposal Writing: Final Draft	Assignment: Proposal Writing: Submit revised Final Draft (Final Revision) Due (12/8)

Course Policies and Expectations:

Professionalism: Students are expected to arrive on time for class. It is expected that students will display a professional attitude at all times, including being attentive during lectures and being respectful to the instructor and fellow classmates. No cell phone use during lecture!

Attendance: Students are expected to attend all classes and are responsible for any material missed. Your success in this class will depend on your attendance and the effort you put forth, both online and in person.

Missed class: Students who miss class, regardless of the reason, are expected to take the initiative to obtain notes and/or homework from a fellow student who attended that class.

Make-up: All online assignments have firm due dates. You'll have access to these for at least three days prior to the due date. Any work turned in after the deadline will receive a **zero** for a grade. If you need a make-up for personal reasons, contact me at least a week before. I will work with you to make appropriate arrangements.

Classroom Accommodations: The University of Texas at Tyler provides, upon request, appropriate academic accommodations for qualified students with disabilities. For more information, contact Disability Services Office at 903-566-7079 or <https://www.uttyler.edu/disability-services/request/>. If this office certifies your need, I will work with you to make all appropriate arrangements.

Artificial Intelligence Statement

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. **You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course is considered a breach of academic integrity.** The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy. *Refer to the About This Course section of the UT Tyler Syllabus Module for specific information on appropriate use of AI in your course(s).*

Academic Integrity

"Academic Dishonesty" includes, but is not limited to: cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable (in whole or in part) to another person without giving sufficient credit, taking an examination for another person, falsifying academic records, and any act designed to take unfair academic advantage by the student (such as, but not limited to: submission of essentially the same written assignment for two courses without the prior permission of the instructor, providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or assignment), or the attempt to commit such acts.

Learner Support:

The University of Texas at Tyler provides institutional support services essential to learner success.

[Student Resources for Hybrid and Online Courses](#) is available for technical support. [Student accessibility and resources](#) are available through The UT Tyler Office of Student Accessibility and Resources (SAR). The office provides students equal access to all educational, social, and co-curricular programs through coordination of services and reasonable accommodations, consultation and advocacy.

[UT Tyler PASS Tutoring Center](#) (University Center, 3114) is a free walk-in tutoring center, with an individual appointment option, for current UT Tyler students. Currently support for 20 courses is being offered in a variety of subjects.

Student

[UT Tyler Student Services](#) provides support and opportunities that maximize a student's ability to benefit from the academic environment through accessibility, professional counseling, recovery, wellness and testing services. The support services encourage personal responsibility and healthy decision-making that contribute to lifelong learning.