Advanced Research Design and Methods
NURS 6337: Section 060
Spring 2026

Scheduled Class Days and Times: Online

Instructor's Name: Mandy Golman, PhD, MS, BSN, RN, IBCLC, MCHES
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Office Hours: Virtual by appointment: Tuesdays from 1:00 – 4:00 PM CST for phone call or video conference. Additional days and times may be arranged upon request. Please email faculty to make arrangements/obtain Zoom link.
***Best way to contact me**

Course Description: Theoretical, methodological, and procedural aspects of data generation and measurement are presented. Measurement theory, concept operationalization, and instrument development and testing for both qualitative and quantitative methods are explored.

Prerequisites: NURS 6330 & NURS 6333

Student Learning Outcomes:

Upon successful completion of this course, the student will be able to:
1. Critically analyze published research and research proposals/grant applications for research rigor.
2. Analyze research instruments for reliability and validity.
3. Develop a quantitative, qualitative, or mixed methods research proposal to study a substantive health problem.

Required Textbooks and Readings:

Creswell, J. W. & Creswell, J.D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.) Thousand Oaks, CA: Sage Publications, Inc. ISBN 9781071817964

Portney, L.G. (2020). *Foundations of clinical research: Applications to evidence-based practice*, 4th edition. Philadelphia, PA: F. A. Davis Company. ISBN 978-0803661134.

American Psychological Association. (2019). *Publication manual of the American Psychological Association. (7th ed.).* Washington, D.C.: Author. ISBN 9781433832161.

Recommended Textbooks and Readings:

Field, A. (2018). Discovering statistics using SPSS, (5th edition). Sage Publications. ISBN 9781526440273 or 9781526436566. (may also use an older edition)

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rded.). New York, NY: McGraw-Hill, Inc. ISBN 0-07-047849-X. (this is a classic upon which many subsequent texts have built). (CLASSIC)

Patton, M.Q. (2015). Qualitative research and evaluation methods (4th ed.). Los Angeles: Sage. ISBN 978-1412972123 or 1412972124.

Waltz, C., Strickland, O. L., & Lenz, E. R. (2017). Measurement in nursing and health research. (5thed.). NY: Springer Publishing Co. ISBN 13: 978-0826170613 or 10: 0826170617. http://www.r2library.com/resource/title/0826170617

Special Course Notes: You may find these resources helpful:
1)Purdue Online Writing Lab
2) SPSS on-line Training Workshop
3) Research Methods Resources Lab: Canvas Organization-this resource is still under development; nevertheless, you may find some helpful nuggets therein.

Academic Integrity: Cheating of any kind, as defined in Section 8 of the UT Tyler Manual of Policies and Procedures (MOPP) for Student Affairs (https://www.uttyler.edu/mopp/), will not be tolerated. Consequences may include:

- reprimand
- exam failure
- course failure
- expulsion from the Nursing program
- expulsion from the University
- other consequences as assigned

Use of AI in this Course

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 (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

You can use AI programs (ChatGPT, Copilot, etc.) in this course. These programs can be powerful tools for learning and other productive pursuits, including completing assignments in less time, helping you generate new ideas, or serving as a personalized learning tool. However, your ethical responsibilities as a student remain the same. You must follow UT Tyler's Honor Code and uphold the highest standards of academic honesty. This applies to all uncited or improperly cited content, whether created by a human or in collaboration with an AI tool. If you use an AI tool to develop content for an assignment, you must cite the tool's contribution to your work following the guidelines established by the APA/MLA/Chicago Style Guide, including the specific version of the tool used.

Exam and homework materials, questions, and problems are the intellectual property of faculty, UT Tyler, or publishers.

- These materials may not be distributed without permission.
- Distributing or uploading them to online resources destroys the integrity of the assignment and the course, allowing others an unfair advantage by letting them view the materials.
- Uploading these materials to online resources is a violation of UT Tyler's academic misconduct policies and may result in formal conduct charges.
- Sanctions for uploading or otherwise divulging the contents of these materials can include:
  - a reduced or failing grade on an assignment
  - a reduced or failing grade for the course
  - removal from the Nursing program
  - removal from UT Tyler

Repeating a Course: Students repeating this course may not use previously submitted assignments nor utilize the same patients for an assignment. Submitting the same or slightly modified assignments from previous semesters is considered self-plagiarism and is subject to academic discipline, including failing the assignment or the course.

Attendance and Make-up Policy: Attendance/participation is expected. Make-up for exams, quizzes, assignments, and missed clinical time is at the instructor's discretion.

Grading Scale:

Specific guidelines and grading criteria for all assignments are in the Modules. Final grades for the course will be determined based upon the following point assignments:

A - 90-100
B - 80-89
C - 70-79
D - 60-69
F - Below 60

Grades will not be rounded when calculating the average (79.5 is not rounded to 80, and 89.5 is not rounded to 90). Students are required to achieve an average of 80% (B) to complete the course successfully.

Late Policy: 5% will be deducted each day an assignment is past due unless prior arrangements

have been made with your course faculty. Extenuating circumstances may apply.

Graded Course Requirements Information:

Review Quantitative Methods (10%): Create a short video summary of your assigned chapters from your quantitative textbook.

Peer Critique (10%): Watch your peers' video summary and provide feedback

Quiz (10%): Tests knowledge of the fundamentals of research.

Domains & Dimensions Table (10%): Explore theoretical constructs/concepts, domains, dimensions, and empirical indicators/items of your intended major outcome variable.

Instrumentation Critique (10%): Explore a popular psychometric instrument.

Theoretical Congruence Critique (10%): Read a variety of proposed purpose statements and their associated theories. Document your opinion on whether the theory provides a right fit for each proposed study's purpose.

Critique of Published Research (10%): Explore a published study in the context of the elements of research design. What aspects were done well and what could have been improved?

Research Proposal (30%): Develop the strongest possible research proposal draft for this stage of your scholarly journey. Proposals may be quantitative, qualitative, or mixed methods. Refer to the dissertation guidelines in PhrnDz for further information.

Please Note: Detailed information along with grading rubrics for course assignments will be provided in Canvas. Assume APA 7th style unless otherwise indicated.

Important Course Dates:

Classes Begin: January 8, 2026
Census Date (withdraw without penalty): January 21, 2026
Last Date to Withdraw: March 24, 2026. Students, please notify your course faculty and contact your advisor.
Spring Break: March 9-13, 2026

Calendar of Modules, Dates, and Topics

Module Information	Dates	Topics
Module 1 Introduction & Review of Quantitative Methods Calendar Weeks 1, 2 & 3	January 8-25, 2026	-Recount the steps of the research process. -Discern the most important aspects for each step of the process.

Martin Luther King Jr. Holiday	**January 19, 2026**	
Module 2 Measurement Theory Calendar Weeks 4, 5, & 6	January 26-February 15, 2026	-Differentiate various concepts related to measurement theory. -Determine key domains and dimensions of the latent variables in your research study -Critically analyze existing research instruments. Synthesize psychometrics of an instrument
Module 3 Theoretical Congruence Calendar Week 7	February 16-22, 2026	- Differentiate between the terms: theory, theoretical framework, & conceptual framework -Critique theoretical congruence
Module 4 Critique of Research Calendar Week 8	February 23-March 1, 2026	-Analyze and critique a research study including the theoretical framework and associated research design and methodologies Complete article critique due **3/9**
Module 5 Methodology Calendar Week 9, & 10	March 2--March 15, 2026	--Analyze issues related to participant recruitment. -Develop a sampling plan and recruitment techniques, sample size and Type II error, power analysis -Start working on research proposal
Module 6 Writing a Proposal Calendar Weeks 11 & 12	March 16-29, 2026	**-Put it all together and submit research proposal**