

NURS 6330: QUANTITATIVE RESEARCH DESIGN

Welcome

Welcome to Quantitative Research Design! The purpose of this course is to build on your concept of interest and mid-range theoretical framework and move toward identifying gaps in knowledge and research designs that may eventually guide your independent research. The outcome of this semester will be a quantitative research proposal. Some of you have very clear ideas about your research question. Others of you may have decided that you want to do a qualitative study. Recall advice from orientation: the question drives the method! So, at least for this semester, we will all consider questions that may be answered using quantitative research methods. Who knows? It may be the question that develops into your dissertation! I am delighted to accompany you this semester on your journey of discovery, challenges to thinking, and creative progress toward your own research proposal.

The structure of this course has been arranged in five MODULES, each covering multiple weeks, to assist you in organizing your time and efforts. **Module 1**, guides you through review and synthesis of scientific literature. **Module 2**, provides a foundation for research as we examine conceptualization of the study including relating theory (yes, theory again!) and moving from concept to variable. During **Module 3**, we practice critiquing rigor and threats to validity and review research designs, including non-experimental, quasi-experimental, and experimental designs. In **Module 4**, we examine and critique interventions. Finally, in **Module 5**, we examine the progress toward the two major goals of the course, critique of published research and drafting a quantitative proposal. The best research idea in the world is meaningless if it can't be conducted for lack of a clear proposal!

I will make every effort to be clear and concise about course expectations. Your job is to ask questions and seek consultation any time things are unclear. I want this semester to be inspiring and meaningful to both your educational endeavor as well as your future research.

Please refer to the information contained in this Syllabus anytime you have a question regarding the basic course information. You can access a printable version of course material by clicking the Printable Version link. You will need to download a free [Adobe Reader](#) to view PDFs.

Welcome to the class!

Introduction

Please refer to the brief power point introduction to the course. I see myself as moving through this research building process with you, as your guides and colleague. I am excited and happy to be part of this semester.

Your faculty,

Danita Alfred, PhD, RN

Office: BRB 2340

Office Hours: online and by appointment

Email: dalfred@uttyler.edu

Phone: 903 566-7019 or 903 539-7019 (cell)

Fax: 903 565-5533

If you experience any problems that you are not able to resolve by accessing the UT Tyler

Canvas Help Desk accessed from your Canvas Dashboard by clicking on the  icon, you can contact me at the numbers listed above.

Course Title: NURS 6330 Quantitative Research Design

Course Description

Advanced quantitative research that integrates methodology, design, measurement, analysis and interpretation.

Prerequisites

Successful completion of NURS 6312, NURS 6322 or concurrent enrollment.

Student Learning Outcomes

Upon successful completion of the course, the student should be able to:

1. Synthesize the state of the science relevant to a substantive transcultural health problem through critical analyses of the literature.
2. Develop a quantitative proposal to study of a substantive transcultural health problem.

Course Outline

Module 1 Conceptualizing the Study

- 1-a. Evolution of concept
- 1-b. Searching and synthesizing literature
- 1-c. Critiquing rigor and threats to validity
- 1-d. Framing the question: Relating theory
- 1-e. From Concept to variable

Module 2 Research Designs

- 2-a. Non-experimental
- 2-b. Quasi-experimental and experimental

Module 3 Methodology

- 3-a. Population and sample
- 3-b. Interventions
- 3-c. Instruments/Measurements
- 3-d. Data collection
- 3-e. Analysis and interpretation

Module 4 Dissemination

- 4-a. Funding and dissemination
- 4-b. Reviewing proposals

Course Calendar/Schedule

The course content and assignments may be viewed by accessing the document located immediately under the course header.

Textbook Information, Other Readings and Materials

The required textbooks for this course are:

Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. 4th edition. ISBN 978-1-4522-2610-1. Thousand Oaks, CA: Sage Publications, Inc.

Portney, L.G., & Watkins, M.P. (2009). *Foundations of clinical research: Applications to practice*, 3rd edition. ISBN 0-13-17460-9. Upper Saddle River, NJ: Pearson Education, Inc. (Please let me know if you have difficulty finding a copy of edition 3.)

Recommended (not required) texts and resources:

Waltz, C., Strickland, O.L., Lenz, E.R. (2017). *Measurement in nursing and health research*. 5th edition. ISBN 13: 978-0826170613 or 10: 0826170617. NY: Springer Publishing Co.

Booklists and bookstore links may be accessed [UT Tyler Barnes and Noble bookstore](#)

Grading Information / Course Requirements

Assignment	Percentage
Fundamentals of Quantitative Research Pre-test	Credit
Review of Literature Outline	5%
Review of Literature	15%
Critiques (2 @ 10 % each)	20%
Concept Map	10%
Quantitative Research Proposal	25%
Peer Critique of Research Proposal	15%
Fundamentals of Quantitative Research Post-test	10%
Total	100%

1. *REVIEW OF LITERATURE AND OUTLINE: This assignment will build on the work you have done in previous courses. You will expand evaluation of the research included in previous semesters. You will add literature related to one or more of the concepts of your planned research and write a review of literature that is concept based and reflects synthesis of the critical studies that support your research topic and help you to identify the gap in research that your study will attempt to fill. Please refer to the "Guidelines and Grading Criteria for a Review of Literature" for a thorough discussion of how to successfully complete this assignment.*
2. *CONCEPT MAPPING: You will design a concept map that depicts the theoretical framework that will guide your study. Identify the variables you will study and relate them to the concepts in the theoretical framework. Upon completion of the map, you should be able to derive the hypotheses and/or research questions that will drive your quantitative study.*
3. *CRITIQUE ASSIGNMENTS: This assignment will help you apply the skills you are learning this semester through critique of published research. These critiques are intended to improve your skills and begin your preparation for Doctoral Preliminary Exams. The peer critique will advantage you and the individual whose proposal you review by helping you identify the components of the research proposal, the logical consistency between those elements, and the clarity and style of writing.*
4. *RESEARCH PROPOSAL: This paper may serve as a draft of your dissertation research proposal or pilot study but is evaluated on the criteria of a course paper, with no expectations of a dissertation proposal! Please refer to the "Guidelines and Grading Criteria for Quantitative Research Proposal Paper" for a thorough discussion of how to successfully complete this paper.*
5. *FUNDAMENTALS OF QUANTITATIVE RESEARCH (Pre and Post-test): A strong grounding in the fundamentals of quantitative research is critical for successful completion of the nursing PhD program. The pre-test serves two purposes, to help us identify your individual grasp of quantitative research concepts and to help both of us identify what areas I need to spend more time reviewing.*

Specific guidelines and grading criteria are located in the respective modules and in the “Assignments” tab on Canvas. 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

Reading Assignments

- Assigned readings in doctoral education are the beginning, not the endpoint. These readings will point you in the direction of continued reading and pondering of your scholarly thoughts. Each participant is responsible for completing the reading assignments in a timely manner. Deadlines are listed in the Course Schedule.
- Assignments are made with the assumption that required readings are completed prior to completion of discussion and written assignments.

Participation Expectations and Discussions

There is no grade associated with the Discussion Board; however, discussion is essential to scholarship and your participation in discussion points identified by your faculty and colleagues are expected.

- Each student is responsible for participating in the asynchronous discussions. This participation will include posting answers to questions posed by the instructor and replying to other participants' postings.
- Discussion postings should be made in a timely manner.
- Quality of answers is as important as quantity. A participant's comments should add to the discussion. Comments should be supported as required with references cited appropriately. The instructor and/or participants may use synchronous chats as the need arises.

Written Assignments

- All written assignments are to be completed in Microsoft Word and submitted in a timely manner. Deadlines are listed in the Course Calendar.
- Please note that all written assignments must be submitted by 11:59 pm Central Time on the due date.
- All written assignments should be submitted through the appropriate link on the Assignment page. (If your web connection is down for some reason, please contact me

by phone to make arrangements to get the assignment submitted within the posted time constraints.)

- Plagiarism is a serious academic offense. Please avoid the consequences of academic dishonesty by citing all sources that you use in your work.
- Late assignments will receive point reductions.

When written assignments are received, I will open them in Microsoft Word for grading using the “track changes feature”. This will enable me to make comments, ask questions, etc. I will then return your assignment through the Student Grade Center area. To see comments about your assignment, click on your grade.

Email

To communicate by email within the course with other participants or all participants, click the INBOX icon on the left side of the Canvas frame. Click Send E-mail to send a message. You are able to send messages to All Users or Select Users in the course, including the instructor. If you need more instructions on how to send email messages with Canvas please read the student guide located in the HELP area of the course.

The course email is dalfred@uttyler.edu

Questions or problems other than technical problems (see Technical Requirements in this Syllabus) may be submitted to the email address above. I will make every effort to respond quickly to your emails. Generally speaking, I check email twice a day during the workweek and less frequently on the weekend. I generally do not respond to weekend emails until Monday morning. Occasionally, I may be traveling, and it might take up to 48 hours to respond. If my schedule makes me unavailable to answer emails for an extended period, I will post an announcement so that you can plan accordingly. One caveat: technical problems in email systems may slow down responses! Our priority is communicating with you, so if there are any problems, we will work together to solve them.

Digital Library Resources

Students enrolled in this course have online access to the UT Tyler [Robert R. Muntz Library](#). Follow this link, and then complete the instructions at those sites for accessing information from a distant site. Many of the database subscriptions funded by student fees give you access to full text journals that you will need for your review of the literature in each course. If a particular journal is not available, the library staff will procure the article for you using the Iliad feature. Please take the time to update your account and get familiar with the resources available. They are awesome.

Technical Support

If you experience technical problems or have a technical question about this course, you can obtain assistance by emailing itsupport@patriots.uttyler.edu

When you email IT Support, be sure to include a complete description of your question or problem including:

- The title and number of the course
- The page in question
- If you get an error message, a description and message number
- What you were doing at the time you got the error message

You may also visit the Help Tab in Blackboard for helpful information.

Plug-ins and Helper Applications

UT Tyler online courses use Java, JavaScript, browser plug-ins, helper application and cookies. It is essential that you have these elements installed and enabled in your web browser for optimal viewing of the content and functions of your online course. For browser support and assistance check the Canvas Student Guides under the Help icon.

[University Policies and Additional Information that must appear in each course syllabus:](#) (This information does not copy live links to the Word document.) Please click on the link above and scroll down to review all of the information. It is complete with live links for more information on the following topics:

- **Syllabus policy**
- **UT Tyler Honor Code**
- **Students Rights and Responsibilities**
- **Campus Carry**
- **UT Tyler a Tobacco-Free University**
- **Grade Replacement/Forgiveness and Census Date Policies**
- **State-Mandated Course Drop Policy**
- **Disability/Accessibility Services**
- **Student Absence for University-Sponsored Events and Activities**
- **Social Security and FERPA Statement**
- **Emergency Exits and Evacuation**
- **Student Standards of Academic Conduct**
- **UT Tyler Resources for Students**

Course Evaluation

UT Tyler may ask you to complete a voluntary evaluation to help them make improvements and adjustments in their overall online learning forums.

Also, an end of semester evaluation specifically for this course will be made available for you to complete in the last week of instruction. Your comments and recommendations will be considered seriously as the course is updated. Your input throughout the semester contributes to our commitment to improve continually the quality and relevance of this course.

Completion Time

You should expect to spend as much time on an online course as you do in a face-to-face course. As a rough guide, you should plan to spend six to ten hours per week on this course. The actual amount of time will vary from individual to individual. This estimate includes the time you spend in reading, discussions, and assignments.

You will have access to most of the course materials from the start of the course to the end. You may look and study ahead, or go back and review, at any time during the course. All assignments have set due dates. Due dates are as of 11:59 pm Central Time on that date.

Getting Started

Please refer to the information contained in this Syllabus anytime you have a question regarding the basic course information. Please begin this course by clicking on the Modules Tab in the left-hand navigation bar.

Epilogue from Faculty

This course is at the heart of why you decided to pursue a PhD in nursing. Every discipline recognizes the PhD prepared individual as an expert in research, discovery, and creativity. Perhaps you don't feel like experts quite yet, but this semester will take you one step closer to that recognition. Just think...you have analyzed concepts, developed theory, synthesized literature, and studied concepts related to policy, education, transcultural research. Now you are ready to propose research that eventually will change health care delivery and people's lives. Your program of research has a beginning and this is it! We are going to have such fun developing research studies that you might not realize you are continuing to build expertise in your field. Welcome to the next step in your program of research! It is going to be a great *and* productive semester.