

### **Quantitative Research Design**

### **NURS 6330**

### Fall 2023

**Scheduled Class Days and Times: Online** 

Instructor's Name: Angela J. Preston, PhD, MSN-Ed, RN, CNE

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**Office Hours:** Thursday from 1-4 PM CST by appointment for phone call or video conference. Additional days and times may be arranged upon request. Please email faculty to make

arrangements/obtain Zoom link.

**Course Description:** Advanced quantitative research that integrates methodology, design, measurement, analysis, and interpretation.

Prerequisites: 6312; 6322 or concurrent enrollment

### **Student Learning Outcomes:**

Upon successful completion of this course, the student will 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.
- 3. Provide structured critique of a published quantitative research study.

## **Required Textbooks and Readings:**

American Psychological Association. (2020). Publication manual of the American Psychological Association, 7thed. Washington D.C.: Author. (softcover).

Creswell, J.W. & Creswell, J.D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches. 5th edition. ISBN-10:1506386709, ISBN-13:9781506386706. Thousand Oaks, CA: Sage Publications, Inc.

<sup>\*</sup>Best way to contact me.

Fink, A. (2020). Conducting Research Literature Reviews: From the Internet to Paper (5<sup>th</sup> Ed.). Sage Publishing. ISBN- 978-1-5443-1847-9

Portney, L.G. (2020). Foundations of clinical research: Applications to Evidence-Based Practice, 4th edition. ISBN-9780803661134. Philadelphia, PA: F.A. Davis.

### **Special Course Notes:**

- 1) Proctoring Notice: No proctoring software required.
- 2) This course requires you to use PIVOT, a online resource UT Tyler subscribes to for the use of locating funding opportunities. You will be provided instructions on how to subscribe using your Patriots email address in Module 1 of this course. https://www.uttyler.edu/research/proposal-development/.

## **Assignments and Weights/Percentage/Point Values**

| Criteria for Evaluation:                 | Percentage of Grade: |
|--|----------------------|
| Funding sources                          | 10%                  |
| Review of literature                     | 30%                  |
| Definitions table                        | 10%                  |
| Quiz of quantitative knowledge           | Pass/fail            |
| Critique of peer-reviewed article        | 10%                  |
| Quantitative research proposal (Outline) | 10%                  |
| Quantitative research proposal (Paper)   | 30%                  |
| Total                                    | 100%                 |

# **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 - 90.0-100

B - 80.0 - 89.9

C - 70.0 - 79.9

D - 60.0 - 69.9

F - Below 60.0

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.

Although the university policy allows 60 days for grade appeals, the School of Nursing follows a stricter timeline of 10 days to facilitate students' timely progression through the curriculum. In the case of extenuating circumstances, please consult the Associate Dean of Academic Affairs for guidance.

**Academic Integrity:** Cheating of any kind, as defined in Section 8 of the UT Tyler Manual of Policies and Procedures (MOPP) for Student Affairs (<a href="https://www.uttyler.edu/mopp/">https://www.uttyler.edu/mopp/</a>), 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

# 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

**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.

**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.

### **Graded Course Requirements Information:**

## In-depth descriptions provided along with specific assignments in Canvas Course.

Funding sources –Identification of possible funding sources for independent research topic and alignment with NINR strategic goals.

Review of Literature (ROL) – In-depth ROL related to selected independent research topic.

Definitions Table – Literature based description of major concepts and variables of independent research topic.

Quiz of Quantitative Knowledge – Online quiz comprised of multiple choice and matching questions to test knowledge and application of major quantitative research elements.

Critique of Published Quantitative Research Methods — In-depth and scholarly discussion and critique of major elements of a peer reviewed and published quantitative research study.

Quantitative Research Proposal Outline – Annotated outline identifing primary elements of the quantitative research proposal as applied to independent research topic using the SON dissertation guidelines for elements of the quantitative proposal.

Quantitative Research Proposal – Proposal built from outline that provides in-depth description of planned research approach and tools that will be used to complete the proposed research.

**Please Note:** Detailed information along with grading rubrics for course assignments will be provided in Canvas.

### **Important Course Dates:**

Classes Begin: August 24, 2023

Census Date (withdraw without penalty): September 6, 2023

Last Date to Withdraw: November 4, 2023. Students please notify your course faculty and

contact your advisor.

### Calendar of Topics, Readings, and Due Dates:

| Course Schedule – Office Hours Held Weekly on Thursdays at 1PM |        |                              |                          |                     |  |
|--|--------|------------------------------|--------------------------|---------------------|--|
| Week#  | Date   | Class Topic                  | Readings                 | Assignments Due     |  |
| Week 1   | R 8/24 | Course Opens                 | All units contain online |                     |  |
|  |        |                              | resources linked in      |                     |  |
|  |        |                              | Canvas in addition to    |                     |  |
|  |        |                              | these required readings  |                     |  |
| Week 2   | M 8/28 | Unit 1:                      | Kearney, 2017            | Graduate            |  |
|  |        | Introduction and             | Kiely & Wysocki, 2020    | affirmation form    |  |
|  |        | funding sources              | NINR Strategic Plan      | 8/31                |  |
|  |        |                              | 2022-2026                | Class zoom 8/31 at  |  |
|  |        |                              |                          | 1PM                 |  |
| Week 3   | M 9/4  | Labor Day Holiday (no class) |                          |                     |  |
|  | T 9/5  | Unit 2: Problem &            | Brennan & Bakken,        | Funding Sources 9/7 |  |
|  |        | significance of              | 2015                     |                     |  |
|  |        | research interest            | Creswell & Creswell, ch  | ROL "quiz"-submit   |  |
|  |        |                              | 1 pg. 3-20               | date/time of appt   |  |
|  |        |                              | Portney, ch 1 & 2        | with university     |  |

|         | F 11/4  | Last day to withdraw   |  |  |
|---------|---------|--|--|--|
|         |         |  | Portney, ch 9 pg. 210-<br>225  |  |
| Week 11 | M 10/30 | Unit 9: Rigor and threats to validity                                | Creswell & Creswell, ch<br>8 pg. 169-171<br>Fink, ch 2 pg. 81-86   | Quiz of Quantitative<br>Knowledge 11/3 |
| Week 10 | M 10/23 | Unit 8: Measurement and analysis                                     | Creswell & Creswell, ch<br>8 pg. 153-160<br>Riley et al., 2011<br>Portney, ch 8-10 & 32                              | Definitions Table 10/26                |
| Week 9  | M 10/16 | Unit 7: Population and sample pool                                   | Creswell & Creswell, ch<br>8 pg. 147-152<br>Fink, ch 2 pg. 87-94<br>Portney, ch 13 & 23                              |  |
| Week 8  | M 10/9  | Unit 6: Quasi- and experimental designs                              | Creswell & Creswell, ch<br>8 pg. 161-177<br>Fink, ch 2 pg. 57-68<br>Portney, ch 14, 16-18                            |  |
| Week 7  | M 10/2  | Unit 5: Non-<br>experimental<br>designs                              | Creswell & Creswell, ch<br>8 pg. XX-XX<br>Fink, ch 2 pg. 69-80<br>Portney, ch 1, 19, & 20                            | ROL- final report 10/5                 |
| Week 6  | M 9/25  | Unit 4: Theory,<br>concepts,<br>variables, and<br>research questions | Creswell & Creswell, ch<br>3 pg. 49-59, 66-72<br>Lambermon et al., 2020<br>Portney, ch 3 & 4<br>Thurman et al., 2019 |  |
| Week 5  | M 9/18  | Unit 3: Literature review  | Dodgson, 2023<br>Fink, ch 2 pg. 49-57,<br>105-135<br>Grant & Boothe, 2009<br>Preston & Rew, 2021                     | ROL- preliminary report 9/21           |
| Week 4  | M 9/11  | Unit 3: Literature review  | Fink, ch 1 pg. 3-37<br>Creswell & Creswell, 2<br>pg. 23-25, 40-43<br>Moher et al., 2009<br>Portney, ch 6             |  |
|         | W 9/6   | Census date  |  | health sciences<br>librarian 9/7       |

| Week 12 | M 11/6  | Unit 10: Critique<br>of published<br>research  | Conn, 2020<br>Portney, ch 36 pg. 558-<br>567                | Critique 11/9   |
|---------|---------|--|---|---|
| Week 13 | M 11/13 | Unit 11: Data collection and intervention      | Creswell & Creswell, ch<br>4 pg. 75-97, ch 8 pg.<br>147-149 | Quant. Research<br>Proposal Outline<br>11/16  |
|         | T       | hanksgiving Week Ho                            | liday no class 11/20-11/24                                  |   |
| Week 14 | M 11/27 | Unit 12: Percolate<br>and ponder               | Review previously assigned material as needed               | Class Zoom- Q&A –<br>11/30 or 12/1 time<br>TBD on first class<br>date<br>Initial date to<br>submit Quant.<br>Research Proposal<br>11/30 |
| Week 15 | M 12/4  | Unit 13: Looking<br>back and moving<br>forward | Review previously assigned material as needed               | Final date to submit<br>Quant. Research<br>Proposal 12/7  |

# **UT Tyler School of Nursing Justice, Equity, Diversity and Inclusion Statement:**

The University of Texas at Tyler School of Nursing aspires to create, foster, and sustain a culture of justice, equity, diversity, and inclusion irrespective of one's identity. We value and embrace all backgrounds, experiences, and identities, realizing that no one group, person or perspective has all the answers. We are richer when our individual skills, knowledge, experiences, cultures, backgrounds, and identities are combined in an accepting community. We strive to ensure that every individual gets a fair and equal chance to participate and thrive in a nurturing environment where all feel a sense of belonging. We are committed to intentionally and deliberately creating a diverse community that instills a sense of equitable justice and belonging for everyone affiliated with our school.

## **School of Nursing Policies and Additional Information:**

https://www.uttyler.edu/nursing/college/student\_guide\_and\_policies.php

Student Resources and University Policies are provided in Canvas.