![UT Tyler School of Nursing logo]

Healthcare Informatics
NURS 6303

Spring 2023
Scheduled Class Days and Times: Online

Instructor's Name: Cheryl D. Parker, PhD, MSN, RN-BC, CNE (Section .060)
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Office Hours: Virtual Office Hours: Friday 1-3 PM CST (by appointment for a phone call or video conference. Additional days and times may be arranged upon request. Please email the faculty to make arrangements/obtain a Zoom link.
*Best way to contact me.

Course Description: Exploration of data management systems needed to manage patient, systems, and research information is the focal point of this course. Students will develop their data analysis and visualization skills with hands-on practice using business software. Refinement of the data analysis plan for the DNP Scholarly Project will be included.

Prerequisites: NURS 6317 and 6371 unless otherwise approved by the program director.

Student Learning Outcomes:

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

1. Evaluate outcomes of care using data analysis techniques. (AACN, 2.7)
2. Evaluate the alignment of system data and comparative patient safety benchmarks. (AACN, 5.2)
3. Design system improvement strategies based on performance data and metrics. (AACN, 7.3)
4. Evaluate the unintended consequences of information and communication technologies on care processes, communications, and information flow across care settings. (AACN, 8.1)
5. Use information and communication technology to gather data, create information, and generate knowledge. (AACN, 8.2)
6. Use information and communication technologies and informatics processes to deliver safe nursing care to diverse populations in a variety of settings. (AACN, 8.2)

Required Materials:

There is no new required textbook in this course. Textbook readings will come from textbooks already required in the DNP program.

Zaccagnini - The Doctor of Nursing Practice Essentials (4th ed., Chapter 4)

Waxman - Financial & Business Management for the DNP (3rd ed.) Chapter 11

All students must have access to the following software applications:

- Most recent versions of Microsoft Word, Excel, and PowerPoint for PC/Mac desktop
- All students will need an **In Place clinical placement** application. If you already have these subscriptions, which cover your time in this class, you are good to go. If not, you need to purchase one through the UT Tyler Bookstore or directly from the vendor.

InPlace Subscription

- InPlace clinical placement/record of hours. Subscription available from UT Tyler Bookstore or from vendor at https://uttyler-us.inplacesoftware.com/signon/account/login?returnUrl=%2Fsignon%2F

OtherTextbooks/Materials

Depending on selected experiential learning by each student. Do not order any books in this section until an individual competency plan has been developed:

Instructions will be found in Canvas and reviewed during the course orientation webinar. Depending on student choices during the course, other resources may be required.

Other learning materials will be provided in the Canvas course.

Recommended Textbooks and Readings:

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). Washington, D.C.: Author.
ISBN-13: 9781433832161

Assignments and Weights/Percentage/Point Values

Criteria for Evaluation	Grade
Participation	10%
Discussions	20%
Data Analysis Assignments	20%
Application Assignments	30%
Webinars	20%
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 - 90-100
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.

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

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:

The following is an overview of the major graded assignments.

Multiple simulated data analysis and visualization activities in these areas must be completed with a minimum of 80 out of 100 possible points for successful completion.

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

Important Course Dates:

Classes Begin: January 9, 2023
Census Date (withdraw without penalty): January 20, 2023
Last Date to Withdraw: March 20, 2023. Students, please notify your course faculty and contact your advisor.
Final Exam: N/A

Course Topics

Module	Subject	Topics
Module 1: Introduction, Objectives and Course Overview (Calendar Week 1)	Jan 9 – 15, 2023	Introductions, Overview, Objectives & Assessments
Module 2: introduction to Clinical Data Management & Basic Data Analysis Skills (Calendar Week 2)	Jan 16 – 22, 2023	Discuss the importance of clinical data management Demonstrate your understanding of basic statistical concepts and power analysis Discuss the relationship of value-based purchasing to evidence-based practice Introduction or review of national quality measures and their impact on healthcare Reflect on using data to support a DNP Project Demonstrate an understanding of basic data analysis using a spreadsheet
Module 3: Data Analysis Plan & Advanced Spreadsheet Skills (Calendar Weeks 3-5)	Jan 23 – Feb 12, 2023	Distinguish between primary and secondary data sources Explain the benefits and limitations of using primary and secondary data sources Determine the best methods of collecting primary data

Module	Subject	Topics
		Distinguish between creating new data collection tools and using existing tools Develop a data analysis plan for your DNP project
Module 4: Advanced Data Analysis Skills (Calendar Weeks 6-8)	Feb 13 – Mar 5, 2023	Perform a data quality assessment Understand and implement methods for addressing data errors Apply file and data manipulation techniques Develop a final analysis data set and data dictionary
Spring Break (Calendar Week 10)	Mar 13 – 18, 2023	
Module 5: Basic Statistical Analysis & Data Visualization (Calendar Weeks 9-11)	Mar 6 – 26, 2023	Use Excel to analyze a dataset using basic statistical analysis Demonstrate an understanding of the basics of data visualization Use software tools to effectively tell a story with data
Module 6: Data Communication & Ongoing Project Monitoring (Calendar Weeks 12-13)	Apr 3 – 16, 2023	Understand the need and use for ongoing monitoring of an EBP project Demonstrate how to effectively use data visualization techniques to communicate information
Impact of IT, Data Usage and the Role of the DNP and Wrap up (Calendar Week 14 &15)	April 17-22, 2023	PatientsLikeme.com Technology & Social Media impact of information technology and data analysis on healthcare policy DB: Reflection on Learnings

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.