



**Applied Informatics: Quality, Safety and Cost
NURS 5383
Spring 2023**

Scheduled Class Days and Times: Online

Instructor's Name: Cheryl McKay, PhD, RN

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Office Hours: 8:30-10:30 AM 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: Provides foundational education in the role of informatics in assisting healthcare organizations, clinicians and consumers to achieve the goals of: (1) quality care, (2) reducing the cost of healthcare, (3) improving the health of populations while improving the experience of the clinician.

Prerequisites: None

Student Learning Outcomes:

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

1. Demonstrate foundational understanding of the quality improvement process and patient safety by completing the Institute for Healthcare Improvement Open School's Basic Certificate in Quality and Safety and completing/presenting the design of a quality improvement project.
2. Analyze patient scenarios using quality improvement methodologies.
3. Practice presentation skills and demonstrate mastery of presentation software during presentation of quality improvement project.
4. Analyze and document a clinical workflow.
5. Select and analyze population health data from a national database and recommend an action plan for health improvement.

Required Textbooks and Readings:

McGonigle, D. & Mastrian, K. G. (2018) *Nursing informatics and the foundation of knowledge 5th edition*. Burlington, MA: Jones & Bartlett Learning

ISBN-13: 9781284122688

Used or Rental is acceptable – no requirement to use online resources

This text is also used in NURS 5381, 5385, & 5387

All students need to load and install Microsoft PowerPoint 365 desktop for PC/Mac.

Instructions will be found in Canvas.

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:	Percentage of Grade
Participation	5%
Discussions	10%
IHI certification	20%
Required Webinars	20%
Application Assignments	25%
Toolkit Learning Assessment	10%
Module Assessments	10%
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.

The toolkit competencies focus on students' development of expert-level competencies in the Microsoft Office applications, a foundational skill for an informatics nurse specialist. This course focuses on Microsoft PowerPoint. These skills will be assessed in learning assessment exercises and applied in application assignments.

Each module will have a *Assess Your Understanding* quiz. The module assessment may be taken as many times as the student wishes. There is no time limit to each attempt however, there is no save and return function. A minimum of 80 out of 100 possible points for successful completion.

Discussion Boards and webinars cover topics of importance in nursing informatics and may be conducted by faculty or guest speakers. These may change from semester to semester, depending on updated information from the nursing informatics field. This course is focused on data analysis and visualization.

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

Based on the 2018 ANCC Test Plan for Certification in Nursing Informatics and the 2017 Healthcare Information and Management Systems Society (HIMSS) Certified Associate in Health Information and Management Systems (CAHIMS) Certification. Assignments may be based on current events in nursing informatics and are subject to change by instructors. See the end of this document for assignment names and date. Go to the Syllabus Page in Canvas for links.

Module	Subject	Topics
Toolkit Competency	Jan 9 – Apr 22, 2023	Presentation software
Module 1: Introduction, Objectives and Course Overview (Calendar Week 1)	Jan 9 – 15, 2023	Introductions, Overview, Objectives & Assessments
Module 2: Quality and Safety (Calendar Weeks 2-4)	Jan 16 – Feb 5, 2023	Institute for Healthcare Improvement Open School's Basic Certificate in Quality and Safety
Module 3: Quality Measures, Methodologies & Outcomes (Calendar Weeks 5-6)	Feb 6 – 19, 2023	Failure Mode Effect Analysis Root Cause Analysis eCQI Using Core measures Quality Data Model/Clinical Quality Language Patient satisfaction surveys
Module 4: Analysis & Change (Calendar Weeks 7-9)	Feb 20 – Mar 12, 2023	Clinical workflow analysis process – Create workflows Value stream mapping Change Management experiences and theories

Module	Subject	Topics
Spring Break (Calendar Week 10)	Mar 13 – 18, 2023	
Module 5: Populations & Informatics (Calendar Weeks 11-12)	Mar 20 – Apr 2, 2023	Community & Population Health
Module 6: Caring & Healthcare Technology Trends (Calendar Weeks 13-14)	Apr 3 – 16, 2023	Technology Delivered Care Patient Education in a Connected World Current Technology Trends - Student Presentations
Wrap up and Finals (Calendar Week 15)	April 17-22, 2023	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.