Health Care Informatics
NURS 5324
Summer 2025

Scheduled Class Days and Times: Online

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*Best way to contact me.

Course Description: This course prepares the student to utilize informatics and health care technologies in the management of individuals, groups and organizations for the improvement of patient outcomes.

Prerequisite: Admission to any MSN program or enrolled in the PhD in Nursing program.

Student Learning Outcomes:

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

1. Analyze current and emerging technologies to optimize safety, cost effectiveness and health outcomes.
2. Utilize select theories that guide the application of informatics in health care and health education.
3. Promote policies that incorporate ethical principles and legal standards in the use of health information and technologies.

Required Textbooks and Readings:

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). Washington, D.C.: Author. ISBN: 9781433832161 / 143383216X

McGonigle, D., & Mastrian, K. G. (2024). *Nursing informatics and the foundation of knowledge* (6th edition). Burlington, MA: Jones & Bartlett. ISBN: 9781284293432

Assignments and Weights/Percentage/Point Values:

1. Application: Role Specific Data Analysis (Excel Part 1 & 2)		25%
2. Current Innovation Assignment		25%
3. Getting Started Assignments/Participation		12.5%
4. Final Quiz		12.5%
5. Big Data Assignment		25%

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 successfully complete the course.

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 (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

Artificial Intelligence: 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.

For this course, AI is permitted only for specific assignments or situations, and appropriate acknowledgment is required. This course has specific assignments where artificial intelligence (AI) tools (such as ChatGPT or Copilot) are permitted and encouraged. When AI use is permissible, it will be clearly stated in the assignment directions, and all use of AI must be appropriately acknowledged and

cited. Otherwise, the default is that AI is not allowed during any stage of an assignment. **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 them 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, clinical time missed is at the discretion of the instructor.

Graded Course Requirements Information:

- **Application: Role Specific Data Analysis:** Data Analysis Assignment #1: Students will learn how to use spreadsheets, an important skill for all nurse leaders. Data Analysis Assignment #2: Students will learn more advanced data analysis building on the knowledge and skills from Data Analysis #1. Select a data set that reflects your program of study (nurse executive, educator, and practitioner). Microsoft Excel will be used for all analysis.
- **Current Innovation Assignment and Discussion:** Identify a current health care technology, summarize, and examine the pros and cons of the innovation (consider cost effectiveness and health outcomes, etc.). Use strengths to select members of an interdisciplinary team as an evaluation team. Instructions and grading criteria are posted. Post your current innovation link, read all peers' posts, post a thought-provoking question to one of your peers, and respond to your peers' question(s).
- **Getting Started Assignments/Participation:** Introductions (Part 1 & 2), APA Quiz, Graduate Affirmation Forms Quiz, and Attestation: Personal Digital File Download, and "Getting to Know You" Student Information Questionnaire.
- **Big Data Assignment – Paper and Discussion (Part 1 & 2). Paper:** Students will write a scholarly paper: Following APA writing style, introduce the concept of big data, identify and discuss key ethical principles, share your reflections/personal thoughts of the future of Big Data, and conclude with a summary of your paper. **Discussion Part 1 (Initial Post):** Locate a scholarly

article on Big Data, synthesize and post a comprehensive summary of the evidence and upload the article to discussions. **Discussion Part 2 (Peer Response):** Read all peer postings and respond to one of your peers using the RISE Model.

- **Final Quiz:** The final quiz will serve as an assessment of the course materials and assigned readings. Quiz blueprint is posted.

Please Note: Detailed information and instructions along with grading rubrics for all assignments will be provided in the Canvas course.

Important Course Dates:

Classes Begin: May 5, 2025
Census Date (withdraw without penalty): May 9, 2025
Memorial Day Holiday (the university is closed): May 26, 2025
Last Date to Withdraw: June 5, 2025. Students, please notify your course faculty and contact your advisor.

Course Schedule for NURS 5324 – Health Care Informatics

Summer 2025

Dates	Topics	Readings	Assignments
Preview Days: May 1		UT Tyler Syllabus Module	**The Canvas course is open and ready for viewing.**
Week 1: May 5 **Census Date:** May 9th	**Welcome to NURS 5324 – 7 week course!** **Module 1. Building Blocks of Nursing Informatics**	Review Getting Started Module Chapters 1, 2, & 7 Lecture Notes	**Due: Wednesday, May 7th** • Graduate Affirmation Forms Quiz • Attestation: Personal Digital File Download **Due: Sunday, May 11th:** **Module - Getting Started:** • Introductions (Part 1 & 2) • APA Quiz • "Getting to Know You" Student Information Questionnaire **Module 1:** • Data Analysis Skills Pre-Assessment Survey
Week 2: May 12	**Module 2. Data Analysis Skills & Cognitive Science and Informatics, Ethical Applications, and Legislative Aspects**	Chapters 4, 5, & 8 Lecture Notes	**Due Sunday, May 18th:** • Data Analysis Skills Part 1 Assignment (Part 1, A & B) and Quiz • Role Specific Data Analysis Skills Part 1 • Data Analysis Skills Post-Assessment Survey

Week 3: May 19	**Module 3. Education Applications of Nursing Informatics**	Chapters 19 & 20
		
		Lecture Notes
			Due Sunday, May 25th:
			• **"Current Innovation" Assignment & Discussion**
			  o Upload your Current Innovation (Padlet link)
			  o **Initial Post:** Post the link to your Current Innovation (Padlet) in Discussion

Week 4: May 26 May 26th – Memorial Day Holiday	Module 4: **Data Analysis Skills**	Online Resources in Modules	**Due Wednesday, May 28th:** **Peer Response:** Post your peer response for the Current Innovation in Discussion **Due Sunday, June 1st:** • Data Analysis Skills (Part 2, A & B) Assignment and Quiz • Role Specific Data Analysis Skills Part 2 • Data Analysis Skills Post- Assessment Survey

Week 5:
June 2
 	
June 5th – Last day to withdraw from course
	Module 5: Nursing Informatics Administrative & Research Applications of Nursing Informatics	Chapters 9, 10, 21 & 23
		
		Lecture Notes
			Due Sunday, June 8th:
			• **Big Data Paper**
			  o Upload your paper in the Online Gradebook
			• **Big Data Discussion Part 1:**
			  o **Initial Post:** Post your comprehensive summary of your Big Data article and upload your Big Data article.

Week 6: June 9	**Module 6. Nursing Informatics Practice Applications: Care Delivery**	Chapters 14, 15, & 18 Lecture Notes	**Due Sunday, June 15th:** • **Big Data Discussion Part 2:** o **Peer Response:** Respond to one of your peers' posting using the RISE Model.
Week 7: June 16	**Module 7: Imagining the Future of Informatics**	Chapters 24 & 25	**Due Wednesday, June 18th:** • **Final Quiz**

*All assignments, quizzes, and exams are due on or before midnight (Central Time) of the assigned date

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.