Health Care Informatics
NURS 5324
Fall 2026

Scheduled Class Days and Times: Online

Instructor's Name: Melinda Hermanns, PhD, RN, PMH-BC, CNE, PN/FCN, ACUE, ANEF (Sections P060 & P064)
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Office Hours: Virtual Office Hours: Wednesdays: 10 a.m. – 1 p.m. CST and available via appointment, email, conference call, and/or Zoom.
*Best way to contact me.

Instructor's Name: Janice Miles, PhD, RN, NI-BC (Section P061)
Office: Virtual
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Office Hours: Virtual Office Hours: Tuesdays 4 p.m. – 5 p.m., Wednesdays 9 a.m. – 10 a.m., and Thursdays 9 a.m. – 10 a.m. CST and available via appointment, email, conference call, and/or Zoom.
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Instructor's Name: Christy Gipson PhD, RN, CNE, ACUE (Section P063)
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Hours: Virtual Office Hours: Wednesdays: 10 a.m. – 1 p.m. CST and available via appointment, email, conference call, and/or Zoom.
*Best way to contact me.

Course Description: This course focuses on principles of informatics and health care technologies.

Prerequisite: Admission to the FNP MSN or Nursing Administration MSN or Nursing Education MSN or NIQS MSN or PMHNP MSN or Nursing PhD.

Student Learning Outcomes:

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

1. Examine current and emerging technologies and the impact on safety, cost, and health outcomes.
2. Evaluate technology in the professional setting for usability and functionality.
3. Apply the principles of data analysis to generate knowledge.
4. Assess legal and ethical issues in the use of health information and technologies.

5. Analyze the use of artificial intelligence in various settings.

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. (2025). *Nursing informatics and the foundation of knowledge* (6th ed.). Jones & Bartlett Learning. ISBN: 9781284293432

Assignments and Weights/Percentage/Point Values:

Current Innovation Assignment	25%
Application: Role Specific Data Analysis	15%
Case Study Analysis	20%
Artificial Intelligence Assignment	20%
Final Quiz	20%
10 Practice Hours (refer to the Pass/Fail Course Requirements Information section)	Pass/Fail

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.

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 for specific assignments or situations, as indicated by your course faculty. Appropriate acknowledgment of AI use is required. Learning how to use AI is an emerging skill, and we will work through the limitations of these evolving systems together. To uphold academic integrity and the spirit of scholarly pursuit, when you utilize any generative AI tools to help with the completion of an assignment, it must be properly documented (which tool was used and how it was used). For any assignment requiring APA formatting and citation style (or other approved style), use the appropriate Style Guide to cite and reference the use of the generative AI tool. Specific assignments may require additional details; see assignment instructions.

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:

- **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).

- **Application: Role Specific Data Analysis:** Students will learn the basics of using spreadsheets. This introduction to data analysis includes basic functions and formulas, data visualization, and pivot tables. Microsoft Excel will be used for all analysis.
- **Case Study Analysis:** Choose a real-world or a hypothetical case based on realistic scenarios in health care involving a legal or ethical dilemma in health care informatics.
- **Artificial Intelligence (AI) Assignment:** This is a two-part discussion assignment. **Part One:** Students will use Microsoft Copilot to analyze the use of AI in various settings. **Part Two:** Students will review one peers' AI output and their discussion post and respond 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.

Pass/Fail Course Requirements Information:

- **Core Courses Practice Hours (if applicable):** If Fall 2025 or thereafter marks your first enrollment in the UT Tyler School of Nursing master's program, to graduate you are required to complete a total of 750 practice hours if you are enrolled in an APRN program or 500 hours if enrolled in a non-APRN program. In this course, you will complete 10 practice hours, which will contribute towards the total requirement. You may not resubmit hours approved for this course in another course. We have created a list of ideas for you to choose from that will enhance your skills and competencies. These practice hours are mandated by our accreditation agency, the Commission on Collegiate Nursing Education (CCNE). Completion of 10 practice hours approved through Exxat are required to pass the course.

Important Course Dates for Flex 1 Session:

Classes Begin: August 27, 2026
Census Date (withdraw without penalty): September 2, 2026
Labor Day Holiday: September 7, 2026
Last Date to Withdraw: September 30, 2026. Students, please notify your course faculty and contact your advisor.
Final Quiz: October 14, 2026

Important Course Dates for Flex 2 Session:

Classes Begin: October 19, 2026
Census Date (withdraw without penalty): October 23, 2026
Last Date to Withdraw: November 18, 2026. Students, please notify your course faculty and contact your advisor.
Thanksgiving Holiday: November 23 - 27, 2026
Final Quiz: December 9, 2026

Course Schedule for NURS 5324 – Health Care Informatics
Fall 2026
Flex 1 Session

Week #	Date	Class Topic	Readings	Assignments Due
Preview Days	August 27		UT Tyler Syllabus Module	**The Canvas course is open and ready for viewing.**
Week 1	August 31	**Welcome to NURS 5324 – 7 week course!** **Module 1. Building Blocks of Nursing Informatics**	Review Getting Started Module Chapters 1, 2, 6 (The DIKW Paradigm: pp. 113-119), & 7 Additional Resources	**Due Wednesday, September 2nd** • Graduate Affirmation Forms Quiz • Attestation: Personal Digital File Download • Introductions (Part 1 & 2) ❖ Practice Hours (if applicable): You are welcome to start working on your practice hours. Keep track of the time spent and you will be notified when you can upload your documentation to Exxat.
	Census Date: September 2 **Labor Day holiday:** September 7			
Week 2	September 8	**Module 2. Cognitive Science and Informatics, Ethical Applications, and Legislative Aspects**	Chapters 4, 5, 8, & 11 Additional Resources	**Due Sunday, September 13th:** • Case Study Analysis ❖ Complete Practice Hours (if applicable)
Week 3	September 14	**Module 3. Data Analysis Skills and Education Applications of Nursing Informatics**	Chapters 19 & 20 Additional Resources	**Due Sunday, September 20th:** • Role Specific Data Analysis Skills Assignment ❖ Complete Practice Hours (if applicable)
Week 4	September 21	**Module 4: Nursing Informatics Administrative and Research Applications**	Chapters 9 (pp. 183-187; 195-196), 10, 13, 21, & 23 Additional Resources	**Due Sunday, September 27th:** • **Current Innovation Assignment & Initial Post:** o Upload your Current Innovation (Padlet link) o **Initial Post:** Post the link to your Current Innovation (Padlet) in Discussion

				❖ Complete Practice Hours (if applicable)
Week 5	September 28	**Module 5: Informatics Based Research Processes (Big Data, Data Mining, Artificial Intelligence, and Machine Learning)**	Chapter 22 & 25 (pp. 606-608) Additional Resources	**Due Wednesday, September 30th:** • **Current Innovation Discussion Peer Response:** ○ **Peer Response:** Post your peer response for the Current Innovation in Discussion **Due Sunday, October 4th:** • **Artificial Intelligence Assignment Part 1 Initial Post** ○ Upload your Word document in Discussion ❖ Complete Practice Hours (if applicable)
	Last day to withdraw from course: September 30			
Week 6	October 5	**Module 6. Nursing Informatics Practice Applications: Care Delivery**	Chapters 14, 15, 16, & 18 Additional Resources	**Due Wednesday, October 7th:** • **Artificial Intelligence Part 2 Peer Response:** ○ Post your peer response for the Artificial Intelligence assignment in Discussion ❖ **If you started UT Tyler SON master's program in Fall 2025:** ○ Complete a total of 10 practice hours and upload into Exxat due **by the end Week 6.**
Week 7	October 12	**Module 7: Imagining the Future of Nursing Informatics**	Chapters 24 & 25 Additional Resources	**Due Wednesday, October 14th:** • **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.

Course Schedule for NURS 5324 – Health Care Informatics
Fall 2026
Flex 2 Session

Week #	Date	Class Topic	Readings	Assignments Due
Preview Days	October 15		UT Tyler Syllabus Module	**The Canvas course is open and ready for viewing.**
Week 1	October 19	**Welcome to NURS 5324 – 7 week course!** **Module 1. Building Blocks of Nursing Informatics**	Review Getting Started Module Chapters 1, 2, 6 (The DIKW Paradigm: pp. 113-119), & 7 Additional Resources	**Due Wednesday, October 21st** • Graduate Affirmation Forms Quiz • Attestation: Personal Digital File Download • Introductions (Part 1 & 2) ❖ Practice Hours (if applicable): You are welcome to start working on your practice hours. Keep track of the time spent and you will be notified when you can upload your documentation to Exxat.
	Census Date: October 23			
Week 2	October 26	**Module 2. Cognitive Science and Informatics, Ethical Applications, and Legislative Aspects**	Chapters 4, 5, 8, & 11 Additional Resources	**Due Sunday, November 1st:** • Case Study Analysis ❖ Complete Practice Hours (if applicable)
Week 3	November 2	**Module 3. Data Analysis Skills and Education Applications of Nursing Informatics**	Chapters 19 & 20 Additional Resources	**Due Sunday, November 8th:** • Role Specific Data Analysis Skills Assignment ❖ Complete Practice Hours (if applicable)
Week 4	November 9	**Module 4: Nursing Informatics Administrative and Research Applications**	Chapters 9 (pp. 183-187; 195-196), 10, 13, 21, & 23 Additional Resources	**Due Sunday, November 15th:** • **Current Innovation Assignment & Initial Post:** o Upload your Current Innovation (Padlet link) o **Initial Post:** Post the link to your Current Innovation (Padlet) in Discussion ❖ Complete Practice Hours (if applicable)

Week 5	November 16	**Module 5: Informatics Based Research Processes (Big Data, Data Mining, Artificial Intelligence, and Machine Learning)**	Chapter 22 & 25 (pp. 606-608) Additional Resources	**Due Wednesday, November 18th:** • **Current Innovation Discussion Peer Response:** ○ **Peer Response:** Post your peer response for the Current Innovation in Discussion **Due Sunday, November 22nd:** • **Artificial Intelligence Assignment Part 1 Initial Post** ○ Upload your Word document in Discussion ❖ Complete Practice Hours (if applicable)
	Last day to withdraw from course: November 18			
Week 6	November 30	**Module 6. Nursing Informatics Practice Applications: Care Delivery**	Chapters 14, 15, 16, & 18 Additional Resources	**Due Wednesday, December 2nd:** • **Artificial Intelligence Part 2 Peer Response:** ○ Post your peer response for the Artificial Intelligence assignment in Discussion ❖ **If you started UT Tyler SON master's program in Fall 2025:** ○ Complete a total of 10 practice hours and upload into Exxat due **by the end Week 6**.
Week 7	December 7	**Module 7: Imagining the Future of Nursing Informatics**	Chapters 24 & 25 Additional Resources	**Due Wednesday, December 9th:** • **Final Quiz**

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