Course Title: NSG 341: Nursing Informatics

Credits: 3 Semester/ Theory Credits

Course Description: Students are introduced to the role, scope, and standards which form the foundation for nursing informatics. This course provides information about technology used to communicate, manage information, and support decision making, to facilitate the achievement of client healthcare outcomes. Information is included related to the areas of nursing science, information management science, and computer science.

Pre-Requisite Courses: NSG 242, NSG 321, NSG 340, PHL 101 or Foreign Language

Co-Requisite Courses: NSG 239, NSG 325, NSG 345

Placement: Eighth Semester, Senior Year.

Faculty: 

Class: 

Textbooks/Materials


Additional readings will be required as noted on the course syllabus.

Recommended Textbooks/Materials:
Course Outcomes: Upon completion of this course, students will:

1. Incorporate the concepts of informatics into nursing practice.
2. Demonstrate skills in using technology and information systems that support safe nursing practice.
3. Learn of communication devices and telecommunication to assist in effective communication in varied healthcare settings.
4. Understand the use of computer information systems to document interventions related to achieving nursing specific outcomes.
5. Use standard terminology in a healthcare environment that reflects nursing’s unique contributions.
6. Discuss ethical and legal considerations of informatics use in healthcare.

Teaching Strategies: The following teaching strategies may be utilized:

1. Lecture
2. Class discussion
3. Exams and quizzes
4. Videos
5. Guest speakers

Description: University Mission:
To continue the Wilkes tradition of liberally educating our students for lifelong learning and success in a constantly evolving and multicultural world through a commitment to individualized attention, exceptional teaching, scholarship and academic excellence, while continuing the University’s commitment to community engagement.

Passan School of Nursing Mission:
The mission of the Passan School of Nursing is to promote interprofessional practitioners of nursing, who provide quality health care in a constantly evolving multicultural world, engage in lifelong learning, and expand nursing science through scholarship, technology, and academic excellence, while engaging in community service.
Assessment of the student’s progress is an ongoing process involving the student and instructor. The final grade is the composite of the theoretical component.

The stated course outcomes serve as the basis of evaluation. Course evaluation tools vary and may include unit quizzes, unit exams, a final exam, term project, and written assignments.

Tests will be objective and/or subjective. Tests will include materials from lectures, readings, and CNSC assignments (Specific to Physical Assessment). If a discrepancy exists among resources, the required textbook is considered the final authority on the subject.

Unannounced quizzes and assignments may be given at any time and additional readings may be assigned.

All unit and final exams must be taken on the scheduled dates. Test dates are subject to change with adequate notification by faculty. If a student is unable to be present for an exam, the student must contact the instructor prior to the exam for permission to miss the exam. If this is not done, a makeup examination will not be given and the test score will result in a “0”.

**Equivalence of grades:**
The theory grade is determined by the following:

- 4.0 = 92 – 100%
- 3.5 = 88 – 91%
- 3.0 = 84 – 87%
- 2.5 = 79 – 83%
- 2.0 = 75 – 78%
- 1.5 = 70 – 74%
- 1.0 = 65 – 69%
- 0.0 = less than 65%

**PROGRESSION POLICY**
In order to progress INTO clinical nursing courses, students must:

- Complete the ATI/TEAS test exam
  - Wilkes University’s Passan School of Nursing requires that the student score 70 or higher, including the Accelerated Baccalaureate students.
NSG 341 Course Syllabus
Spring

- Earn a 2.5 or better in all prerequisite nursing courses:
  - BIO 113 (Microbiology); BIO 115, and 116 (Anatomy and Physiology I and II); CHM 111 (Fundamentals of Chemistry); and ENG 101 (Composition).
- Maintain an overall Grade Point Average (GPA) of 2.5 or greater.

In order to progress THROUGH the nursing curriculum, all nursing majors must:
- Earn a 2.5 or better in all nursing courses.
- Earn a 2.5 or better in all required science courses.
- Meet expected outcomes in all nursing courses.
  - A nursing student who earns less than a 2.5 in a nursing course may repeat that course once.
    - A nursing student who earns less than a 2.5 in a second nursing course is ineligible to continue in the nursing program.
- Maintain an overall Grade Point Average (GPA) of 2.5 or greater.

The theory grade will be determined as follows:

Exam I…………………………………………………………20%
Exam II………………………………………………………20%
Written Assignment…………………………………………………20%
Quizzes …………………………...…………………20%
Final Exam …………………………………………….20%

Course Policies:

The link for the Passan School of Nursing Handbook is:

All students are required to read and submit an attestation document at the beginning of each academic year. Students must adhere to all policies in the Passan School of Nursing Handbook.

Professionalism:
Please see policy in the Passan School of Nursing Student Handbook.
 Attendance:  
The faculty and staff of the Passan School of Nursing understand that the student is an adult learner. Attendance is required at all classes.

Dress Policy:  
Please see policy in the Passan School of Nursing Student Handbook.

Academic Honesty:  
At Wilkes the faculty and the entire University community share a deep commitment to academic honesty and integrity. The following are considered to be serious violations and will not be tolerated:

1. Plagiarism: the use of another’s ideas, programs, or words without proper acknowledgement.
2. Collusion: improper collaboration with another in preparing assignments, computer programs, or in taking examinations.
3. Cheating: giving improper aid to another, or receiving such aid from another, or from some other source.

Any student who violates the Intellectual Responsibility and Plagiarism Policy will fail the course.

Communication Policy:  
Please see policy in the Passan School of Nursing Student Handbook.

Taping:  
The School of Nursing adheres to all university policies on academics published in the Wilkes University Student Handbook. In addition, the student is advised to read and comply with the policies of the School of Nursing published in the Nursing Student Handbook as noted online. Students are not permitted to tape lectures without specific permission from the instructor.

Completion of Required Clinical Nursing Simulation (CNSC) Requirements:  
Please see policy in the Passan School of Nursing Student Handbook.

Examination Policy & Procedure:  
Please see policy in the Passan School of Nursing Student Handbook.
**Medication Proficiency Policy:**
Please see policy in the Passan School of Nursing Student Handbook.

**Assignment Due Dates:**
Please see policy in the Passan School of Nursing Student Handbook.

**Academic Support:**
If a student earns a grade of less than 79% on any exam, the student is expected to meet with the course instructor. The student may also be asked to meet with the Retention and Remediation Coordinator. At the time of midterm, the student is strongly advised to discuss their academic concerns, if any, with their nursing advisor, course instructor, and Retention & Remediation Coordinator. The student may be referred to University College, located in Conyngham Hall, for academic support services (i.e. peer tutoring, test taking support, time management, note taking, and study skills).

**Student Community Service Requirement:**
Please see policy in the Passan School of Nursing Student Handbook.

**Policy on Integrated Testing Program:**
All students are required to complete the Integrated Testing Program administered by the School of Nursing.
Please see policy in the Passan School of Nursing Student Handbook.

**Course Examinations:**
Please see policy in the Passan School of Nursing Student Handbook.

**Advisement:**
Every nursing major is assigned a faculty advisor within the Passan School of Nursing. Students must check the roster as posted in the Passan School of Nursing.
Please see policy in the Passan School of Nursing Student Handbook.
<table>
<thead>
<tr>
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| 1      | Welcome                                                                      | • Review course syllabus  
• Discover course resources on D2L/LIVE                                                                evinco                                                                                           | Course syllabus  
Course Resources On D2L/LIVE                                                                 | • Self-Assessment Activity: knowledge of nursing informatics                                                                 | 1                                                    |
| 2      | Basic Concepts in Informatics  
Science and Knowledge  
Computer Science and Foundation of Knowledge Model | • Define nursing informatics and key concepts  
• Assess how information impacts healthcare and nursing informatics  
• Assess the relationship of nursing informatics and information technology  
• Identify and define key nursing informatics terminology                                                                 | McGonigle & Mastrian. (2015). Chapters 1 & 2  
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| 3      | Foundations and Perspectives on Nursing Informatics | • Assess how information impacts healthcare and nursing practice  
• Identify the relationship of data, information, knowledge, and wisdom  
• The usefulness of data input and collection in healthcare | McGonigle & Mastrian (2015). Chapters 3 & 4  
(1) Informatics Module  
(2) Literacy Skills and consumer Educational Needs  
• Quiz I | 1, 2, 3, 4, 5, 6 |
| 4      | Nursing Informatics Competencies  
Ethics Implications  
Support of nursing informatics | • Discuss how clinical technology impacts healthcare and nursing practice  
• Discuss how nursing informatics supports ethical nursing practice | McGonigle & Mastrian (2015). Chapters 19 & 20 | • Exam I | 1, 3, 4, 5, 6 |
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| 5      | EHR and Patient Safety: Nursing Informatics, Safety and Standards | • Explain what meaningful use means to the nurse  
• Explain the benefits of implementing an electronic health record (EHR)  
• Describe the ethical considerations in nursing informatics  
• Examine the opportunities and barriers with utilizing technology for patient education | McGonigle & Mastrian (2015). Chapters 10, 11, 12  
HeathIT.gov. ‘EHR Incentives & Certification’. (2014). Retrieved from https://www.healthit.gov/providers-professionals/ehr-incentives-certification | • Quiz II | 1, 2, 3, 4, 5, 6 |
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| 7      | Nursing Informatics: Systems Development Life Cycle | - Define the systems development life cycle (SDLC)  
- Assess the challenges with the HITECH Act | McGonigle & Mastrian (2015). Chapters 6, 7, 8 & 9  
- ATI: Video Case Study Informatics and Nursing  
- Exam II | 1, 2, 3, 4, 5, 6 |
| 8      | Legal and Ethical Aspects         | - Discuss EHR security and how the HITECH Act and HIPAA are related to nursing practice  
- Explain the significance of technology security, specifically as it relates to healthcare  
- Identify methods to protect network security | McGonigle & Mastrian (2015). Chapters 13 & 18  
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| 9      | Quality Improvement and Patient Safety | • Discuss how technology can impact community health and improve patient outcomes of care  
• Identify how the use of technology in the healthcare setting can promote patient safety  
• Case Study: Technology in the Community Settings. Discussion and questions to follow  
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