This course supports the assessment for Advanced Information Management and the Application of Technology. It covers 5 competencies and represents 3 competency units.

Introduction

Overview
In the Advanced Information Management and the Application of Technology course, you will examine the interface of technology and nursing experienced by a Masters prepared nurse, and examine the complementary roles of the Masters level-prepared nursing information technology professionals, including informaticists and quality officers. You will analyze current and emerging technologies and information systems that support safe, quality, evidence-based patient care, examine ethical, legal and regulatory Informatics issues related to current healthcare environments, also explore the various roles nursing informatics plays in healthcare.

Watch the following welcome video for an introduction to this course:

Welcome Video.

Competencies:
This course provides guidance to help you demonstrate the following:

Competency 744.3.1: Information Management
The graduate evaluates information management systems that support timely, high quality, patient-centered care.

Competency 744.3.2: Leadership in Nursing Informatics
The graduate integrates knowledge of nursing initiatives, professional organizations, and leadership into strategies for enhancing nursing informatics.

Competency 744.3.3: Health Information Systems
The graduates distinguishes between the critical and useful electronic data needed for effective decision support (clinical, financial and administrative outcomes) to provide high quality and efficient care.

Competency 744.3.4: Information Security
The graduate evaluates the privacy and security of data within healthcare organizations. ensure quality patient outcomes.

**Competency 744.3.5: Current and Future Technologies**

The graduate evaluates the implications of current and emerging technologies for practice, research, education, and administration.

**Preparing for Success**

The information in this section is provided to detail the resources available for you to use as you complete this course.

**Learning Resources**

The learning resources listed in this section are required to complete the activities in this course. For many resources, WGU has provided automatic access through the course. However, you may need to manually enroll in or independently acquire other resources. Read the full instructions provided to ensure that you have access to all of your resources in a timely manner.

**Automatically Enrolled Resources**

You can access the learning resources listed in this section by clicking on the links provided throughout the course. You may be prompted to log in to the WGU student portal to access the resources.


**Topics and Pacing**

Unit 1: Introduction and Getting Started

Unit 2: Information Management

Unit 3: Health Information Systems

Unit 4: Information Security

Unit 5: Current and Future Technologies

Unit 6: Leadership in Nursing Informatics

Unit 7: Final Performance Assessments
Advanced Information Management and the Application of Technology

Built through a partnership between Acrobatiq, a courseware and learning analytics content provider, this course is centered on the learning outcomes outlined by Western Governors University. The activities included throughout the course will provide continuous practice opportunities for students. Use the links provided to access the Acrobatiq online course. After each lesson in the course, you are encouraged to participate in interactive student learning community activities. Upon completion of the course, return to the course of study to complete the performance assessment.

Read the course Introduction and Learning Strategies section carefully, before you begin the coursework. There are 7 units total, in this course.

**Unit 1: Introduction and Information Management**
This section provides an overview of information management to help nurses moving into advanced practice roles to begin integrating informatics into practice.

**Unit 2: Information Management**
This section of the course provides an overview of nursing informatics to help nurses moving into advanced practice roles begin the process of integrating informatics concepts into their daily practice.

This topic addresses Competency 744.3.1: Information Management - The graduate evaluates information management systems that support timely, high quality, patient-centered care.

This Unit covers the following topics:
- Applying Information to the Nursing Process
- Quality Indicators
- Crossing the Quality Chasm
- Quality Data for Quality Care
- Foundation of Knowledge Model
- Nurses as Knowledge Workers
- Data
- Knowledge
- Relationship between the Foundation of Knowledge model and information science
- Nursing Informatics and Information Technology
- Introduction to Health Information Systems
**Unit 3: Health Information Systems**
Health Information Systems (HIS) is a broad area in Informatics. All nurses must be able to utilize the appropriate system, gather data, and make appropriate recommendations to the health care team. Today's nurses must be efficient on the web, know how to navigate websites, and how to identify appropriate sites for their organization and individual practice.

This topic addresses Competency 744.3.3: Health Information Systems - The graduates distinguishes between the critical and useful electronic data needed for effective decision support (clinical, financial and administrative outcomes) to provide high quality and efficient care.

This Unit covers the following topics:
- The Evolution of Health Information Systems
- Components and Functions of Integrated Health Information Systems
- Barriers to Patient-Centered Care
- Benefits of HIS and the Impact of User Resistance
- Maintaining Interoperability, Scalability, and Compatibility
- Data Quality and HIS Design
- A Common Language for Sharing Electronic Health Information
- Nurse Role in Informatics
- Information and Communications Technologies (ICT) Governance and Policies
- Verifying the Validity and Reliability of Data
- Critical Data for Effective Clinical Decision Support
- Presenting Number-based Evidence for Formal Business Presentations

**Unit 4: Information Security**
As data becomes more electronic, the nurse must understand information security and policies surrounding information. Each patient has the right to have personal and health information be protected and secure. Safeguarding both physical and electronic information must be considered when creating, following, and enforcing information security policies.

This topic addresses Competency 744.3.4: Information Security The graduate evaluates the essential elements of safety, security, privacy, in an information management system or informatics project.

This Unit covers the following topics:
- Information Security and the Heath Information Portability & Accountability Act (HIPAA)
- Electronic Health Records and Privacy
- Nurse’s Role in Mitigating Information Security Risks
- Legal and Ethical Issues in Information Security
- Network Security Breaches
- Accessing and Storing Electronic Health Records – Policies and Legislation
- HIS Security Frameworks
- Information Security Safeguards
- Risk Analysis Plans and Best Practices

**Unit 5: Current and Future Technologies**
As technology becomes ubiquitous, the nurse must understand how new technologies fit within the health information technology infrastructure. Current and future technologies provide nurses with the opportunity to improve patient outcomes through increasing access to data and evidence.

This topic addresses Competency 744.3.5: Current and Future Technologies. The graduate evaluates the implications of current and emerging technologies for practice, research, education, and administration.

**This Unit covers the following topics:**
- Telehealth Technologies and Practice
- Legal Issues and Telehealth
- Characteristics of Telehealth
- Rogers Diffusion of Innovations Theory
- Interdisciplinary Collaboration and Innovation
- Emerging Technologies and Healthcare Delivery

**Unit 6: Leadership in Nursing Informatics**
Nurse leaders have an important role in NI. Not only do they help select, participate in evaluating, and implement different information technologies, they must also know current NI initiatives and advocate the use of NI tools. In order to do all that is required of a NI leader, it is essential that they understand their role in supporting information technology used in healthcare settings. In order for nurse leaders to effectively make decisions, and support the delivery of clinical care, nurse leaders must actively participate in the selection, evaluation, and implementation of technologies in care delivery. They must stay up-to-date regarding NI initiatives and the on-going efforts of professional health organizations. They must also be educated, prepared to lead and mentor, and advocate for NI initiatives.

This unit addresses Competency 744.3.2: Leadership in Nursing Informatics The graduate integrates knowledge of nursing initiatives, professional organizations, and leadership into strategies for enhancing nursing informatics.

This Unit covers the following topics:
- Nursing Informatics Initiatives and Professional Organizations
- Obstacles for Nursing Leaders in Technology-Based Decision Making
Unit 7: Final Assessments
Congratulations on completing the activities in this course! This course has prepared you to complete the two assessments associated with this course; a paper and a PowerPoint presentation. Please return to the course launch page for more information and to access your course assessments.

Please view the PowerPoint Basics presentation if you need help with PowerPoint.

If you feel confident in your grasp of the material presented in this course, please return to the course launch page to complete your final course assessments. Contact your course instructor if additional support or clarification is needed.