Minnesota State University Moorhead

NURS 638: Health Information Systems

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course provides foundational knowledge regarding healthcare informatics and information systems. Students will learn the history and basic definitions of concepts related to healthcare informatics. Students will explore the benefits and barriers in adopting health information technology within healthcare organizations. Students will discuss how data can be leveraged from information systems to drive process changes that promote patient-centered care, patient safety, and quality improvement. The course will focus on: (a) Background and foundational information for health informatics; (b) Information systems and applications for delivery of healthcare; (c) Participatory healthcare informatics and healthcare on the internet; (d) Life cycle of the health information system/project management; (e) User experience, standards, safety, and analytics in health informatics; (f) Governance structures, legal, and regulatory issues in health informatics; (g) Education and informatics; and (h) The future of health informatics, including international efforts and bioinformatics. Same as MHA 638

B. COURSE EFFECTIVE DATES: 10/03/2015 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

- 1. Basic concepts of health informatics, electronic health records, health information exchanges
- 2. Use of data and informatics to support clinical decision making

Version 3.1.4 Page 1 of 2 05/09/2024 10:15 PM

D. LEARNING OUTCOMES (General)

- 1. Analyze the role of informatics and bioinformatics in the support of consumer and public health by leveraging data to reduce risks and improve health outcomes.
- 2. Analyze the role of informatics in educating adult learners.
- 3. Describe the basic concepts of healthcare informatics.
- 4. Describe the benefits and limitations of utilizing electronic health records.
- 5. Analyze ethics, data confidentiality, privacy, and security when utilizing health information systems.
- 6. Illustrate how data may be leveraged and analyzed to create process changes within healthcare organizations.
- 7. Analyze the benefits of Health Information Exchange (HIE) and interoperability of health information systems.
- 8. Analyze the role of health information technology in patient safety and quality improvement.
- 9. Discuss governance structures, legal, and regulatory issues relating to healthcare informatics.
- 10. Apply project management concepts during the entire life cycle of health information systems.
- 11. Compose patient-care technologies plans that may help deliver, enhance, communicate, and coordinate care within and between healthcare organizations.
- 12. Evaluate the concepts of participatory, eHealth, and mobile healthcare.
- 13. Propose technologies that could support clinical decision making, patient education, and/or the prevention of errors.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted

05/09/2024 10:15 PM Version 3.1.4 Page 2 of 2