Healthcare Information Systems

HCA 410

Southwestern College Professional Studies

COURSE SYLLABUS

I. Course Catalog Description

Information systems contribute to the quality, effectiveness, and efficiency of healthcare service delivery, management, and administration. The requirements of information systems continue to evolve with integration with health information exchanges, telemedicine and its disciplinary counterparts, and other emerging technologies. Learners examine the ethical, legal, and regulatory requirements for information systems and their integration with strategic, clinical, and operational decision making, as well as routine organizational processes. The methods for assessing feasibility, selecting, implementing, evaluating, and securing the use of information systems and technology to support current and emerging healthcare trends and applications are also explored. Prerequisites: HCA 280 - The Healthcare Industry and HUM 201 - Ethics. Prior study of healthcare legal and regulatory requirements regarding information systems, security, and patient privacy is highly recommended.

II. Required and Supplementary Instructional Materials

There is no textbook for this course. Instead, this course relies on industry scholarly/professional journal articles, credible multimedia resources, and learner research to develop a knowledge base in this ever-changing, fast-paced field of healthcare information systems. See the course site for direct links to all required instructional materials.

III. Course Learning Outcomes

Course learning outcomes describe the knowledge, skills, values, and attitudes that learners gain as the result of a particular learning experience. Southwestern College Professional Studies has learning outcomes specific to each program of study that are in line with the institutional outcomes of critical thinking, ethical reasoning, leadership, communication, and career preparation. Course outcomes support program outcomes and are listed below.

Upon successfully completing this course, the learner will be able to:

1. Describe how information systems and technology contribute to successful strategies, effective clinical and administrative management, quality and performance improvement, financial viability, and patient-centric care in healthcare organizations.
2. Evaluate the potential application of emerging healthcare information systems and technologies and their impact on healthcare strategies, operations, and patient care.
3. Assess the ethical and legal considerations for the application of information systems and technology in healthcare organizational settings and the implications for healthcare delivery.
4. Explain the role of leadership and management in the selection, integration, and application of information systems and technologies in healthcare organizational settings.
5. Recommend a plan for the selection, design and development, implementation and maintenance of an information system or technology in a healthcare organization.

Unit	Objectives	Topics Covered	Course Outcomes Supported
1	1. Explain how managers use decision support software to effectively manage healthcare organizations. 2. Examine how managers select healthcare information systems to accomplish organizational strategies. 3. Illustrate how healthcare managers evaluate potential healthcare information systems.	• Decision Support software • Selection and Evaluation of Healthcare Information Systems • Interoperability	1:1 2:5 3:2
2	1. Explain the role of health informatics and the barriers to adoption within the healthcare environment. 2. Differentiate between data, information, and knowledge and the methods used to convert information into knowledge. 3. Argue the role electronic health records play in healthcare, with specific focus on data analytics.	• Health Informatics • Converting Information into Knowledge • Electronic Health Records and Data Analytics	1:4 2:1 3:2
3	1. Explain the importance of data security and privacy measures that are part of HIPAA, HITECH Act, and Meaningful Use, how they fit into the national health IT strategy, and how they are designed to protect health data. 2. Examine the methods available to prevent data breach and loss and to ensure authentication. 3. Summarize the complexities that exist in the relationship between ethics, law, culture, and society and how it drives the behavior of healthcare professionals.	• Health Data Security • Date Breach Prevention • Complexities that Influence Healthcare Professionals	1:4 2:5 3:3
4	1. Explain the challenges facing healthcare professionals in staying current with latest developments and research in medicine and the role played by digital resources. 2. Describe the benefits and limitations of evidence-based medicine, highlighting the interrelationship with electronic health records and clinical practice guidelines, and how evidence-based medicine is used to answer medical questions. 3. Analyze the reasons data standards are necessary for interoperability, comparing and contrasting the various standards used for electronic health records and Meaningful Use.	• Challenges Facing Healthcare Professionals • Evidence-based Medicine • Data Standards • Electronic Health Records • Meaningful Use	1:1 2:2 3:5
5	1. Illustrate the role health information technology plays in supporting quality improvement initiatives, specifically those	• Quality Improvement Initiatives	1:2 2:4 3:3

	sponsored by the Centers for Medicare and Medicaid Services (CMS). 2. Examine how healthcare information systems contribute to improving patient safety programs. 3. Describe how healthcare information systems plays a role in disease management.	• Improving Patient Safety • Disease Management	
6	1. Identify the different technologies that have had a significant impact on health care and the benefits and obstacles to implementation. 2. Explain how EHR data is used in various phases of research, and how informatics supports the ongoing management of clinical trials. 3. Describe new trends in data management, real-time analytics, and data mining.	• Benefits and Obstacles to Technology Implementation • EHR Data in Research • New Data Trends	1:5 2:3 3:4

At the end of the course, learners may vary in their ability to achieve these outcomes and unit objectives. You are more likely to achieve these only if you attend class and/or online activities as required by the syllabus, complete the requirements for all assignments to the best of your ability, participate actively in class activities and group work as directed, and study diligently for exams.

IV. Course Policies

Students are expected to read and abide by the course policies found in the instructor-specific syllabus located in the Blackboard course.

V. Course Requirements

Requirements	**Number of Assignments**	**Points Possible**	**Percent of Grade**
Discussions	6	240	24%
Unit 1-5 Assignments	5	500	50%
Unit 6 Mastery Assignment	1	260	26%
Total Points		**1000**	**100%**

VI. Course at a Glance

Unit	**Graded Work Due**	**Relevant Reading/Viewing Prep**	**Unit Learning Objectives Supported**
1	• Unit 1 Discussion (see course site for all discussion deadlines) • Interoperability Paper, due by Sunday at 11:59 pm CT	All unit materials	D1 - 1,2,3 A - 1,2,3
2	• Unit 2 Discussion • HITECH Act Position Paper, due by Sunday at 11:59 pm CT	All unit materials	D2 - 2,3 A - 1,3
3	• Unit 3 Discussion • Cyber Threat Research Paper, due by Sunday at 11:59 pm CT	All unit materials	D3 - 1,2 A - 1,2,3
4	• Unit 4 Discussion • Chronic Disease Management Paper, due by Sunday at 11:59 pm CT	All unit materials	D4 - 2 A - 1,3

5	• Unit 5 Discussion • Medication Error Reduction Report, due by Sunday at 11:59 pm CT	All unit materials	D5 - 1,2 A - 1,2,3
6	• Unit 6 Discussion • Mastery Assignment: Emerging HIT Implementation Plan and Presentation, due by Sunday at 11:59 pm CT	All unit materials	D6 - 1,3 MA - 1,2,3

VII. Other Policies and Requirements

Follow this link to the Southwestern College Professional Studies Standard Syllabus in Blackboard. You may be required to log in.