CATALOG DESCRIPTION
The role of health information management and the electronic health record that includes computer hardware, operating systems, networking concepts, and user interfaces. Emphasis is placed on the practical application of database management principles, data security, and information retrieval and reporting inherent in electronic health records management.

PREREQUISITES
CSIS 115, HIM 101, HIM 108, HIM 110, HIM 112

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:
1. Comprehend the basic functions of a computer to include hardware, software, networks, and intranet technologies.
2. Describe the role of computer operating systems in health information processing.
3. Classify network structures in data communications between healthcare providers and reporting agencies.
4. Explain the role of computer languages and user interfaces in computerized records management.
5. Apply common computer applications to healthcare and health information management situations.
6. Employ database management software in the organization and retrieval of structured information, for internal and external health data reporting.
7. Apply the appropriate security technology to the access, use and sharing of health information.
8. Understand the collection and maintenance of data elements for use in data sets and databases to assure accuracy, integrity, privacy, and security to meet organizational needs.
9. Apply policies and procedures relating to privacy and security requirements, audit trails, data security, staff training needs, and risk management for compliance.
10. Relate the importance of electronic health records (EHR) certification as it pertains to security measures.
11. Evaluate timeliness, completeness, accuracy, and appropriateness of data and data sources for patient care, management, billing reports, registries, and/or databases.
12. Analyze the processes related to the planning, design, selection, implementation, integration, testing, evaluation, and support of information systems.
13. Define need and use of specialized software for record tracking, release of information, registries, quality improvement, and imaging.
14. Facilitate and apply policies and procedures for use of the EHR, personal health records (PHR), patient registration, and other administrative applications.
15. Evaluate and demonstrate the value of various health information media (paper, electronic, internet, and intranet).
16. Apply data storage and retrieval methodologies and imaging technology in an electronic environment.
17. Apply retention and destruction policies for health information.
GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

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<tr>
<th>Outcomes</th>
<th>ESO</th>
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PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Explain the processes used in the selection and implementation of health information management systems
2. Utilize health information to support enterprise wide decision support for strategic planning

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Assignments (3, 5, 6, 8, 11, 13, 14, 17)
2. Class discussion (2, 4, 10, 14)
3. Group projects (1, 5, 7, 8, 9, 10, 12, 13, 15, 16)
4. Examinations (1, 2, 5, 6, 7, 8, 9, 11, 12, 13, 15, 16, 17)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Information Systems Concepts as it Applies to Healthcare
   A. Data definition
   B. Data organization (normalization, indexing)
   C. Information storage and retrieval

II. Computer Hardware and Peripheral Devices as it Applies to Healthcare

III. Operating Systems and Computer Security as it Applies to Healthcare

IV. Network Structure and Communications as it Applies to Healthcare

V. Programming Languages and the User Interface as it Applies to Healthcare

VI. Applications Software for Healthcare Information as it Applies to Healthcare

VII. Data Management Principles and Database Applications as it Applies to Healthcare
   A. Technology utilized in EHR applications
   B. Coding schemes
   C. Data quality and reliability
   D. System security

VIII. Database Structures, Use and Maintenance as it Applies to Healthcare

IX. Electronic Health Records Systems
   A. Technology utilized in EHR applications
   B. Coding schemes
   C. Data quality and reliability
   D. System security