Course Number and Title: HIM 220 HIM and Healthcare IT

Campus Location:
Wilmington

Effective Date:
2020-53

Prerequisite:
HIM 100

Co-Requisites:
HIM 225

Course Credits and Hours:
3.00 credits
2.00 lecture hours/week
2.00 lab hours/week

Course Description:
This introductory course focuses on health record and information systems. Topics include compliance, the Health Insurance Portability and Accountability Act (HIPAA), communication and network technologies, integration of systems, interoperability, and databases. Emphasis is placed on information security and the development, implementation, and maintenance of relational databases to support healthcare delivery.

Required Text(s):
Obtain current textbook information by viewing the campus bookstore - https://www.dtcc.edu/bookstores online or visit a campus bookstore. Check your course schedule for the course number and section.

Additional Materials:
Allied Health/Science Department Program Student Policy Manual

Instructor handouts

Schedule Type:
Classroom Course

Disclaimer:
AHIMA Virtual Lab is used in this course

Core Course Performance Objectives (CCPOs):

1. Apply policies and procedures to ensure the accuracy and integrity of health data. (PGC 1)
2. Collect and maintain health data. (PGC 1)
3. Apply confidentiality, privacy, and security measures and policies and procedures for internal and external use and exchange as well as retention and destruction policies to protect health information. (CCC 5; PGC 2)
4. Use software to complete health information management (HIM) processes. (PGC 3)
5. Explain policies and procedures of networks, including the intranet and Internet, to facilitate clinical and administrative applications. (PGC 3)
6. Explain the process to select and implement HIM systems. (CCC 5; PGC 3)
7. Use health information to support enterprise-wide decisions for strategic planning. (PGC 6)
8. Apply report generation technologies to facilitate decision-making. PGC 3)
9. Explain usability and accessibility of health information by patients, including current trends and future challenges. (PGC 3)
10. Explain current trends and future challenges in health information exchanges. (CCC 5; PGC 3)
11. Analyze policies and procedures to ensure organizational compliance with regulations and standards. (CCC 2; PGC 5)
12. Apply information, data strategies, and information assets in support of information governance initiatives and organizational strategies and objectives. (CCC 2; PGC 6)
13. Summarize project management methodologies. (CCC 5; PGC 6)
14. Explain vendor and contract management. (CCC 5; PGC 6)
15. Explain database architecture and design. (CCC 2; PGC 6)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

Measurable Performance Objectives (MPOs):
Upon completion of this course, the student will:

1. Apply policies and procedures to ensure the accuracy and integrity of health data.
    1. Use processes for data governance and stewardship where quality data is achieved, maintained, and valued.
    2. Explain the sources of data used for patient care, disease management, and disease prevention.
    3. Use data integrity concepts and standards to ensure confidentiality, integrity, and availability of data.
    4. Explain the evolution of health information exchange and data sharing.
    5. Explain data interchange standards (X2, HL7) used for the exchange, management, and integration of electronic information.
    6. Use effective policies, processes, and techniques in the application of policies to ensure the accuracy and integrity of health data.
    7. Explain the potential risks to the accuracy and integrity of health data associated with 'copy and paste' functionality.
2. Collect and maintain health data.
    1. Explain the collection and maintenance of health data in screen design for health information systems.
    2. Explain the various components, types, and structures of databases used in healthcare information systems.
    3. Explain the purposes of data mapping and its importance to linking disparate systems and data sets.
    4. Explain clinical data sources and data warehousing to make data available to a wide variety of users.
3. Apply confidentiality, privacy, and security measures and policies and procedures for internal and external use and exchange as well as retention and destruction policies to protect health information.
    1. Outline policies and procedures required for the electronic health record (EHR), personal health record (PHR), and applications for storing protected health information.
    2. Write sample policies and procedures required for confidentiality, security, and retention of applications containing protected health information.
    3. Explain the use of internal and external standards, regulations, and initiatives to ensure data privacy, confidentiality, and security.
    4. Identify policies and procedures to ensure organizational compliance with state and federal privacy and security laws.
    5. Identify policies and procedures to ensure operational compliance for patient identification and verification processes.
    6. Explain current trends and future challenges in medical identity theft and measures available to prevent medical identity theft.
    7. Explain the processes used to ensure compliance with regulatory guidelines for data security and monitoring.
    8. Identify policies and procedures for retention and destruction related to data storage and retrieval, eDiscovery, information archive, and data warehouses to ensure organizational compliance with legal and regulatory requirements.
    9. Apply system security policies according to departmental and organizational data/information standards.
    10. Apply policies and procedures surrounding issues of access and disclosure of protected health information.
4. Use software to complete health information management (HIM) processes.
    1. Demonstrate use of record tracking functionality within an HIM computer application.
    2. Demonstrate use of release of information functionality within an HIM computer application.
    3. Describe how registry information is collected, stored, used, and transmitted.
    4. Describe how computer applications are used within the revenue cycle.
    5. Describe how quality improvement applications can be used within the HIM department.
    6. Describe how voice recognition technology can be used within an EHR.
    7. Demonstrate scanning, indexing, and viewing of a medical record document within a document imaging system.
    8. Describe appropriate use of spreadsheets, databases, and word processing within the healthcare facility and the EHR.
    9. Describe how imaging technology is used within the HIM department.
    10. Describe how natural language processing applications can be used within the HIM department.
    11. Demonstrate the use of EHRs in the HIM department.
    12. Demonstrate the use of PHRs in the HIM department.
    13. Explain the use of document imaging technology in the HIM department.
    14. Explain the process used for EHR certification.
    15. Explain database architecture and design for HIM software applications.
    16. Describe how system testing and integration tools are used within the HIM department.
5. Explain policies and procedures of networks, including the intranet and Internet, to facilitate clinical and administrative applications
    1. Describe the functions of the basic components of the personal computer to include hardware, software, networks, and Internet technologies.
    2. Identify the impact of computers in healthcare in all areas within a facility.
    3. Discuss the history of computers in healthcare.
    4. Compare and contrast the similarities and differences among the Internet, the intranet, and the extranet as used in healthcare.
    5. Explain the EHR and the benefits of its use over the paper record in acute care facilities.
    6. Identify reports that demonstrate the integrity of data contained within the HER.
    7. Identify the role of distributed systems in facilitating collaborative computer communications.
    8. Compare and contrast the uses and standards for the EHR, PHR, portals, public health, and telehealth technologies in the delivery of healthcare services.
6. Explain the processes used to select and implement HIM systems.
    1. Describe the components of and requirements for an EHR system.
    2. Discuss the selection process for an EHR system.
    3. Outline the steps required for implementation of an EHR, including integration and testing.
    4. Describe the type of support required to maintain an EHR.
    5. Explain the process used to select and implement HIM systems, including the strategic planning process, the integration of systems, the information management strategic plan, and the corporate/enterprise strategic plan.
7. Use health information to support enterprise-wide decisions for strategic planning.
    1. Describe the components of disaster and recovery planning related to information systems.
    2. Describe the components of disaster and recovery planning related to information process continuity.
8. Apply report generation technologies to facilitate decision-making.

1. Select reports to retrieve information regarding employee and departmental performance.
2. Select reports to monitor the integrity of the EHR.
3. Select reports from the record and deficiency tracking systems to support physician notification.
4. Select reports from the release of information systems to monitor compliance with policies and procedures.

9. Explain usability and accessibility of health information by patients, including current trends and future challenges.
    1. Explain usability and accessibility of mobile technologies, patient portals, patient education, outreach, patient safety, personal health records (PHRS), and patient navigation.
    2. Describe current trends regarding the usability and accessibility of health information by patients.
    3. Describe future challenges regarding the usability and accessibility of health information by patients.
10. Explain current trends and future challenges in health information exchanges.
    1. Describe the current trends for the ability to exchange data across multiple entities:
        1. Employer to health provider
        2. Health provider to health provider
        3. Health provider to employer
        4. Facility to facility
        5. Health information exchange (HIE)
    2. Describe the future challenges for the ability to exchange data across the multiple entities listed in 10.1.
11. Analyze policies and procedures to ensure organizational compliance with regulations and standards.
    1. Describe the components of the ARRA, including the adoption of EHRs and the Health Information Technology for Economic and Clinical Health Act (HITECH) regarding the use of computers, software, the Internet and telemedicine to improve the quality of healthcare, the healthcare population, and efficiency of systems supporting healthcare delivery.
    2. Explain the stages necessary to comply with regulatory requirements for meaningful use of EHRs.
    3. Analyze the gap between the existing EHR system and Stage 3 of meaningful use.
12. Apply information, data strategies, and information assets in support of information governance initiatives and organizational strategies and objectives.
    1. Use critical thinking skills to develop strategies and processes for data governance and stewardship where quality data is achieved, maintained, and valued.
    2. Use critical thinking skills to describe the types of data and the relationships between data and information models.
    3. Apply appropriate data analysis tools to prepare relevant data presentations.
13. Summarize project management methodologies.
    1. Describe the systems development life cycle related to the EHR and project management methods used.
    2. Explain the role of the professional management professional (PMP) in the achievement of organizational projects for a wide variety of HIM systems.
14. Explain vendor and contract management.
    1. Explain the purpose of the request for information (RFI) as related to vendor and contract management.
    2. Explain the purpose of the request for proposal (RFP) as related to vendor and contract management.
15. Explain database architecture and design.
    1. Construct a template for a data dictionary for an HIM application.
    2. Construct a data dictionary entry for one or more fields in an HIM application.
    3. Draw a diagram illustrating the relationship among data collection, data storage, and data reporting.
    4. Given a data set, upload the data into a database or other data analytics program so that a query can be applied to the data.
    5. Describe interoperability standards used within and across organizational boundaries to effectively deliver healthcare for individuals and communities.

Evaluation Criteria/Policies:
Students must demonstrate proficiency on all CCPOs at a minimal 75 percent level to successfully complete the course. The grade will be determined using the Delaware Tech grading system:

92	**–**	**100**	**=**	**A**
83	**–**	**91**	**=**	**B**
75	**–**	**82**	**=**	**C**
0	**–**	**74**	**=**	**F**

Students should refer to the Student Handbook - https://www.dtcc.edu/handbook for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

Final Course Grade:
Calculated using the following weighted average

Evaluation Measure	Percentage of final grade
Labs (formative)	18%
Homework (formative)	12%
Presentation/Projects: 1 project @ 5%; 2 @ 10% (summative)	25%
Case Studies (equally weighted, summative)	20%
Exams: 2 exams are weighted at 10% and 5% (summative)	15%
Final Exam: 1 exam weighted at 10% (summative)	10%
TOTAL	100%

Core Curriculum Competencies (CCCs are the competencies every graduate will develop):

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):

1. Synthesize knowledge of medical sciences, clinical classification systems, vocabularies, and terminologies to effectively use, apply, and interpret health data.
2. Analyze data to identify trends through the use of health information technologies.
3. Apply legal, regulatory, privacy, and security standards to employ policies and procedures for health information collection, access, and disclosure.
4. Synthesize knowledge of health data and payment methodologies to evaluate the efficiency and effectiveness of revenue cycle processes.
5. Interpret regulatory, coding, legal, and clinical documentation standards to develop, implement, and evaluate compliance.
6. Consistently demonstrate leadership through the appropriate interpretation and evaluation of professional behaviors and ethical standards.

Disabilities Support Statement:
The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the disabilities services - https://www.dtcc.edu/disabilitysupport web page or visit the campus Advising Center.