Course Title: **Electronic Health Records**
Prefix and Course Number: **HIM 162**

Course Learning Outcomes:
By the end of this course, a student should be able to:

- Conduct analysis to ensure that documentation in the health record supports the diagnosis and reflects the patient's progress, clinical findings, and discharge status.
- Use technology, including hardware and software, to ensure data collection, storage, analysis, and reporting of information
- Participate in the planning, design, selection, implementation, integration, testing, evaluation, and support for EHRs
- Apply knowledge of database architecture and design (such as data dictionary) to meet departmental needs
- Protect data integrity and validity using software or hardware technology
- Apply the fundamentals of team leadership
- Participate in and work in teams and committees
- Use tools and techniques to monitor, report, and improve processes

Course Outline:

I.   **Data Analysis and Management**
   A. Identify current needs for tools to manage unstructured health information
   B. Identify how data errors occur
   C. Identify how clinical decision support can resolve risk or anomalies of data
   D. Describe the different repositories and warehouses used to store and gather patient data
   E. Describe electronic document management systems
   F. Identify the steps in workflow re-design
   G. State how data produces information which is then used as knowledge
   H. Describe the formats of EHR data
   I. State how data sets are used in EHR implementation
   J. Briefly describe data registries and their functions
   K. Explain the data mapping process in the HER
   L. Describe the process mapping stage and how this affects EHR implementation III. 4: Explain the different types of signatures found in the HER
   M. Define a data dictionary

II. **Compliance**
   A. Describe automated forms processing
   B. Explain how templates are used to gather patient data

III. **Information Technology**
   A. Describe how data is input in the computer and the importance of data quality
   B. Summarize the training process
   C. Describe and demonstrate how databases are used in EHR implementation
   D. Define electronic signature authentication
   E. Explain single sign-on
   F. Recognize the differences and similarities between elements of EHRs in acute and ambulatory settings

    G. Define enterprise content and record management and how it fits into EHR migration

    H. Explain how application functionality plays a role in the system development life cycle

    I. Describe the migration path for the HER

    J. Differentiate between the various EHR systems

    K. Discuss data conversion and go-live

    L. Evaluate the functionality of acute care applications

    M. Describe the migration path for hospitals

    N. Differentiate between the various types of infrastructure preparedness and how human factor may affect the preparedness

    O. Demonstrate how to navigate an EHR to assist in troubleshooting of the software

    P. Describe audit controls

    Q. Express how surveying users is important for an effective functional needs assessment

    R. Explain the need for user satisfaction surveys

    S. Describe the steps in the vendor selection process

    T. Choose a vendor that would meet a facilities need

    U. Identify and briefly describe the analysis step in the system development life cycle

    V. State what step in the system development life cycle would apply to software and system maintenance

    W. Describe the roll-out, turnover, and conversion strategies

    X. Summarize the testing process

    Y. Create a data dictionary

IV. Quality

    A. Construct a process map

    B. Describe the various group facilitation techniques (brainstorming, nominal group, etc.)

    C. Describe what functions HIM provides to the SDLC of EHR implementation

V. Knowledge Statement

    A. Describe how the ONC has impacted health IT.

    B. Explain what meaningful use is and how it's impacted the implementation of the HER

    C. Describe HL7 and the role it plays in the HER

    D. Differentiate between ICD-9 and ICD-10 coding systems and SNOMED CT, LOINC and RxNORM nomenclatures