Print Date: 10/7/16

**Course Objectives/Course Outline**
**Spokane Community College**

**Course Title: Computer Application in Health Information Management**
**Prefix and Course Number: HIM 160**

**Learning/Performance Expectations: (e.g., outcomes, performance objectives, competencies, etc.)** By the end of this course, the student should be able to:

- Use technology, including hardware and software, to ensure data collection, storage, analysis, and reporting of information
- Use common software applications such as spreadsheets, databases, word processing, graphics, presentation, e-mail, and so on in the execution of work processes
- Apply policies and procedures to the use of networks, including intranet and Internet applications, to facilitate the electronic health record (HER), personal health record (PHR), public health, and other administrative applications
- Use appropriate electronic or imaging technology for data/record storage
- Protect data integrity and validity using software or hardware technology
- Use and summarize data compiled from audit trails and data quality monitoring programs

**Course Outline**:

**I. Data Analysis and Management**
- **A.** Recognize how hardware and software is needed to facilitate abstraction of patient data
- **B.** Describe how queries and data mining are facilitated and used to abstract data found in the health record
- **C.** Explain the chart deficiency system
- **D.** Describe how data can be abstracted from clinical information systems I.2: Identify data analysis tools used in healthcare
- **E.** Recognize how hardware and software is needed to facilitate analysis of patient data
- **F.** Explain the chart locator system
- **G.** Describe how the master patient index (MPI) leads to data quality and identify the components to the MPI
- **H.** Explain how document imaging and document management ensures data is organized into a useable format
- **I.** Prepare data into a useable format
- **J.** Show how to gather data from multiple sources
- **K.** Name the various data sources
- **L.** Define data warehouse, data mart, data repository and state how data is complied
- **M.** Identify software applications used to run spreadsheets
- **N.** Show how to generate reports or spreadsheets
- **O.** Show how to present data findings
- **P.** Recognize data sets used in various healthcare agencies
- **Q.** Name the various types of registries in healthcare
- **R.** Write a paper summarizing finding from data research/analysis
- **S.** Explain the importance of backing up data
- **T.** Describe how data management is needed for data storage and retrieval I.22: Define a data dictionary
- **U.** Describe how mapping is used in the EHR

**II. Coding**

**A.** Explain how an encoder and grouper facilitates accurate coding and reimbursement

**III. Compliance**

**A.** Explain the security guidelines that apply to safeguards
**B.** Define access controls
**C.** Recognize how the various types of signatures found in the EHR ensure documentation completeness
**D.** Describe an audit trail

**IV. Information Technology**

**A.** Describe software applications used in healthcare
**B.** Describe how users will be trained on software and the electronic system
**C.** State the elements and structure of a database and describe the data base models
**D.** Demonstrate how to maintain a database
**E.** Describe the various types of data access
**F.** Define the various information systems and how their functionality contributes to patient care
**G.** Describe the components of the HER
**H.** Identify why access controls and passwords are needed to create user accounts
**I.** Demonstrate how to create a database
**J.** Identify the steps taken in system selection and implementation
**K.** Describe the steps taken in the end user needs analysis and how it plays a role in system selection
**L.** Explain how data archive and backup policies ensures data recovery
**M.** Demonstrate how to maintain software
**N.** Define a data dictionary

**V. Quality**

**A.** State the importance of accurate data entry to ensure data timeliness, data accuracy, data reliability, and data integrity
**B.** Explain the various types of signatures found in the EHR and how they contribute to health record completeness
**C.** Indicate the various standards that apply to the EHR
**D.** Describe data standards applicable to the electronic health record (EHR)
**E.** Identify a workflow process
**F.** Identify why triggers indicate a possible audit V.10: Identify how data quality ensures accurate data collection for quality reporting

**VI. Legal**

A. Describe release of information (ROI) systems used to respond to ROI requests

**VII. Revenue Cycle**

**A.** Define the chargemaster

**VIII. Knowledge Statement**

**A.** Identify computer applications and support systems in health information management
**B.** Explain the dictation and transcription process and describe speech recognition