

## **NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY HIM 130 – HEALTHCARE INFORMATION SYSTEMS (3 CR.)**

### **Course Description**

Teaches basic concepts of microcomputer software (to include operating systems, word processing, spreadsheets, and data base applications). Focuses on microcomputer applications and information systems in the healthcare environment. Provides a working introduction to electronic health information systems for allied health, teaching students how the adoption of electronic health records affects them as future health care professionals. Lecture 3 hours per week.

### **General Course Purpose**

This course is designed to provide a working introduction to the topics, issues, trends, and uses of healthcare information systems across various professions. Understanding health information systems, microcomputer software (to include operating systems, word processing, spreadsheets, and database applications), information systems life cycle, reengineering, and the special needs in healthcare.

### **Course Prerequisites/Co-requisites**

Students must be able to read and write at a college level, have a wiliness to learn, and a solid understanding of personal computer applications.

### **Course Objectives**

Upon successful completion of this course, the student will be able to:

- Identify, discuss and use important categories of application software; word processing, spreadsheet, database management, and preparation of presentations and graphs.
- Describe a basic understanding of JCAHO healthcare information technology regulations.
- Describe the factors that led to the emergence of electronic health records.
- Describe the functions of electronic health records and explain the advantages they offer over paper-based records.
- Demonstrate an understanding of how paper records are converted to an electronic health record system.
- Explain the importance of clinical standards in the development of interoperable electronic health records.
- Demonstrate an understanding of how electronic health records are used in physician practices and other outpatient settings.
- Demonstrate an understanding of how electronic health records are used in hospitals.
- Describe the different types of personal health records and explain how personal health records differ from electronic health records.
- Demonstrate an understanding of the challenges that electronic health information poses to the privacy and security of patient's health information.
- Demonstrate an understanding of how HIPAA privacy and security rules apply and may not provide adequate protection in today's health care environment.
- Based on hands-on-experience, describe the benefits of using Practice Partner, a physician practice electronic health record.
- Effectively utilize information technology and medical terms as they apply to electronic health records.
- Identify concepts that are unique to healthcare information systems.
- Describe the basic structure of a health information system.

## **Major Topics to be Included**

- a. Microcomputer applications in healthcare
- b. EHR in Ambulatory Care and other Healthcare Settings
- c. Systems life cycle
- d. The reengineering methodology
- e. Use of computers to create, calculate, structure and present data that is related to healthcare
- f. Exploration of healthcare information technology in different settings
- g. Understanding microcomputers and their role in the healthcare environment
- h. Data and File structure
- i. Word processing applications in the EHR
- j. HIPPA and the EHR functions
- k. Database, creation, modifying, sorting, and queries
- l. Internet and its role in healthcare
- m. How to research the internet and healthcare sites
- n. How to evaluate reputable internet information
- o. Basic use of electronic mail for communications