# River Valley Community College One College Place Claremont, NH 03743

February 2013

## TOPICS IN HEALTHCARE INFORMATION TECHNOLOGY

CURRICULUM AND COURSE NUMBER: CYBSC 110R

**DEPARTMENT:** Business/Computer Technology

**CREDIT HOURS:** 3

SEMESTER HOURS: CLASS: 2 LAB: 2

PREREQUISITES/COREQUISITES: None

#### **COURSE DESCRIPTION**

Healthcare organizations have unique Information Technology requirements that require uniquely qualified IT professional to ensure the security of the Healthcare IT systems. This course provides the IT professional with the required knowledge to adequately traverse the vastness of the Healthcare IT environment.

# **Course Competencies:**

- 1. Understand and explain the behavior of a Healthcare organization.
  - a. Overview of Healthcare.
  - b. Ethics and Healthcare.
  - c. Role of IT in Healthcare.
  - d. Using IT in Healthcare to measure and improve patient outcomes.
  - e. Leadership and management in Healthcare IT.
- 2. Understand, explain and apply the regulatory requirements of a Healthcare organization.
  - a. Healthcare IT and the Healthcare Policy.
  - b. Health Data Standards and Interoperability.
  - c. Healthcare IT Regulation.
  - d. Electronic Medical Record/Electronic Health Record as Evidence.
- 3. Understand, explain and evaluate the normal operations of the "Healthcare Business."
  - a. Healthcare IT Core Functionality
  - b. Healthcare IT and the Human Factors.
  - c. Healthcare IT Success Factors
  - d. Healthcare IT Interoperability: Opportunities and Challenges.
  - e. Clinical Decision Support
  - f. Successful Healthcare Informatics Implementation
  - g. Reporting Requirements, Regulatory and External Factors that Affect Healthcare
  - h. Successful Implementation of Healthcare IT through Training.
- 4. Evaluate the Healthcare IT system for security, privacy and confidentiality.
  - a. Building Trust in Healthcare IT.
  - b. Risk Assessment, Analysis and Management.
  - c. Physical Security
  - d. Operational Security in Electronic Health Record and Healthcare Information Exchange.

- e. Healthcare Cybersecurity
- f. Healthcare IT Products and Systems Certification
- 5. Apply security, privacy and confidentiality concepts to the Healthcare IT system.
- 6. Understand and evaluate the normal operations of a Healthcare IT system.
  - a. Hardware Architecture of the Healthcare IT system.
  - b. Programming in Healthcare IT.
  - c. Databases, Data Warehousing, and Data Mining for the Healthcare IT system.
  - d. Project Management in Healthcare IT.

## **Course Outline:**

- 1. Healthcare Organizational Behavior.
- 2. Healthcare Regulatory Requirements.
- 3. Healthcare Business Operations.
- 4. Healthcare IT Security, Privacy, and Confidentiality.
- 5. Healthcare IT Operations.

# **Learning/Instructional Methods:**

LecturesDiscussionsPowerPoint PresentationsTerm Papers

Lab and Reading Assignments

## **Performance Evaluation:**

Midterm and Final Exams

Term Paper

Quizzes

Weekly written assignments

Discussion participation

**Suggested Text(s):** Please refer to syllabus

Origination date: