River Valley Community College One College Place Claremont, NH 03743

February 2013

ELECTRONIC MEDICAL RECORDS SYSTEMS & INFORMATION ASSURANCE CERTIFICATION AND ACCREDITATION PROCESS

CURRICULUM AND COURSE NUMBER: CYBS 200R

DEPARTMENT: Business/Computer Technology

CREDIT HOURS: 3

SEMESTER HOURS: CLASS 2 LAB 2

PREREQUISITES/COREQUISITES: CYBS 110R

COURSE DESCRIPTION

Cybersecurity specialists working in the Healthcare field must have a thorough knowledge of the Electronic Medical Record System (EMRS) and the Information Assurance Certification and Accreditation Process (IACAP). As medical records continue to transition into electronic forms, the Healthcare IT profession needs to be aware of how the data is used and stored by software. Additionally, the Healthcare IT professional needs to be able to assess the entire IT system and ensure that the system is hardened against attack while meeting industry accreditation and certification standards.

Course Competencies:

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

- 1. Identify the components of the Electronic Medical Record System (EMRS) and how they integrate into the computer network.
- 2. Install, patch, update and upgrade and EMRS.
- 3. Manage users within the EMRS.
- 4. Manage roles and responsibilities within the EMRS.
- 5. Input data into the EMRS.
- 6. Create reports and track anonymous patient data.
- 7. Provide end user support with using the EMRS.
- 8. Evaluate a Healthcare organization's Information Assurance Certification and Accreditation Process (IACAP) posture.
- 9. Implement a phased approach in conducting IACAP. To include:
 - a. Definition
 - b. Verification
 - c. Validation
 - d. Post Accreditation
- 10. Understand and evaluate the roles and responsibilities of a Healthcare organization in their IACAP program.
- 11. Provide a comprehensive IACAP report identifying security vulnerabilities and providing baseline corrective actions.

CYBS 200R EMRS/IACAP Page 1

Course Outline:

- 1. Identify the EMRS and its role in the Healthcare IT System.
- 2. Determine the differences between the Commercial Off the Shelf (COTS) forms of EMRS and the Open Source EMRS products available and analyze the specific benefits of each.
- 3. EMRS Installation and Maintenance
- 4. EMRS Use and Management.
- 5. EMRS Reports and Data Mining.
- 6. Troubleshooting the EMRS and end user assistance.
- 7. Information Assurance Certification and Accreditation Process
- 8. Roles and Responsibilities of the Healthcare IT system's IACAP.
- 9. Conducting the IACAP.
- 10. IACAP Reporting

Learning/Instructional Methods:

LecturesDiscussionsPowerPoint PresentationsTerm PapersLab and Reading AssignmentsCourse Project

Performance Evaluation:

Midterm and Final Exams

Term Paper

Quizzes

Weekly written assignments

Discussion participation

Course Project

Suggested Text(s): Please refer to syllabus

Origination date:

Revisions: