River Valley Community College

1 College Drive Claremont, NH 03743-9707

Computer Technology Department

Course Title: Network Security CYSC120

3 Credit(s)

Fall, 2014

Henry Collier

Office Location: Claremont, Room 153

Office Hours: By appointment

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Class Hours: Monday 5:00AM-8:50 PM

Course Pre- or Co-requisite(s): None

Course Objectives

This course offers a comprehensive guide for anyone wishing to take the CompTIA Security+ SY0-301 Certification Exam. It provides an introduction to the fundamentals of network security, including compliance and operational security; threats and vulnerabilities; application, data, and host security; access control and identity management; and cryptography. The course covers new topics in network security as well, including psychological approaches to social engineering attacks, Web application attacks, penetration testing, data loss prevention, cloud computing security, and application programming development security. Students will also engage in activities that link to the Information Security Community Site.

Specific topic coverage includes:

- Introduction to Security
- Malware and Social Engineering Attacks
- Application and Network Attacks
- Vulnerability Assessment and Mitigating Attacks
- Host, Application, and Data Security
- Network Security
- Administering a Secure Network
- Wireless Network Security
- Access Control Fundamentals
- Authentication and Account Management
- Basic Cryptography
- Advanced Cryptography
- Business Continuity

Risk Mitigation

Method(s) of Instruction and Grading:

Classroom lecture, hands on practical exercises, tests, quizzes, term paper and homework

Grading:

- A 94-100 A- 90-93 B+ 86-89 B 83-85 B- 80-82 C+ 76-79 C 73-75
- C- 70-72 (Non-transferable)
- D 63-69 (Essentially an F) F 59 and below

Textbook(s) & Supplies:

Network Security, Firewall & VPNs, 2ed, Stewart, ISBN 978-128-403-1676 Laboratory Manual Version 1.5 to Accompany Network Security, Firewalls & VPNs.

Course Procedures/Rules of Conduct:

Please refer to the Student Handbook for clarification of academic honesty.

The Computer Technology Degree program has a code of conduct that all students will read and sign annually. This code of conduct has a zero tolerance policy. Failure to sign the code of conduct will result in being dropped from all Cybersecurity and computer technology classes.

Intellectual Property Rights:

Students enrolled in this course that choose to continue past the course drop date with full refund (see page 34 of the student handbook) have chosen to opt in to the conditions of this course. Any and all work completed by the students, as part of this course, is the property of River Valley Community College and may be used by the faculty or staff in any way to better the academic community at RVCC. Students will receive appropriate acknowledgement or credit for such usage.

Accommodations for Students with Learning Disabilities:

This college provides reasonable accommodations for students with learning disabilities. Students who require course accommodations due to documented disabilities must share their college Accommodation Plans with me. Please contact the Disability Coordinator in Room 234 or at 542-7744, extension 2271 if you do not have a college plan or would like more information about disability services.

Student Support Services:

All students are invited to visit the Department of Instructional Services (Room 234) for information on how to access tutoring, Writing Center, PLATO, personal computers, related academic workshops, and disability support services.

Attendance:

Attendance is a very important element to college success. Please act responsibly. *Due to Federal Financial Aid regulations attendance is periodically reported to the Registrar.*

Classroom Safety:

Safety is everyone's responsibility.

CAVEAT:

This syllabus is subject to change at any time.