

River Valley Community College

Principles of Information Assurance CYBS 101R ZZ

Fall Semester 2015

Instructor: Mike DeBlock

Instructor email: mdeblock@ccsnh.edu

Syllabus

Last updated: 09/2015

Welcome

Welcome to Principles of Information Assurance. This course will be your introduction to Information Assurance / Security. Through this course you will gain a foundational understanding of the concepts in Information Assurance.

Course Description

This course provides an overview of security challenges and strategies of countermeasure in the information systems environment. Topics include definition of terms, concepts, elements, and goals incorporating industry standards and practices with a focus on availability, vulnerability, integrity and confidentiality aspects of information systems.

Prerequisites

Computer Network Security (CPTC212)

Blackboard Student Orientation

If this is your first online course at CCSNH, please complete the online student orientation. This orientation offers the opportunity to familiarize you with online courses.

http://www.ccsnh.edu/online-learning-blackboard/students

Available Technical Support

Frequently asked questions regarding online learning, Student Information System (SIS) and student email can be found at the link below by clicking "Support Center".

http://www.ccsnh.edu/academics/online-learning-blackboard

Required Resources

Textbooks:

TITLE: Fundamentals of Information Systems Security, Second Edition

AUTHOR: David, and Solomon

• COPYRIGHT YEAR: 2014

• PUBLISHER: Jones & Bartlett Learning

• ISBN: 9781284031621

Textbooks are available through the College Bookstore.

- Go to the College's website (<u>www.rivervalley.edu</u>), look under "Student Resources," and then click on Bookstore.
- Use the course number (CYBS 101R ZZ) to locate textbook information.

Software/Free Downloads: These will allow you to access a variety of course resources, including, but not limited to, podcasts, videos, and PDF files.

Acrobat Reader

Flash Player

QuickTime Player

PowerPoint Viewer

JAVA

Google Drive / Docs

Learning Objectives

Upon completion of this course the student should be able to:

- Explain the concepts of information systems security as applied to an IT infrastructure.
- Describe how malicious attacks, threats, and vulnerabilities impact an IT infrastructure.
- 3. Explain the role of access controls in implementing a security policy.
- Explain the role of operations and administration in effective implementation of security policy.
- Explain the importance of security audits, testing, and monitoring to effective security policy.
- Describe the principles of risk management, common response techniques, and issues related to recovery of IT systems.

- 7. Explain how businesses apply cryptography in maintaining information security.
- 8. Analyze the importance of network principles and architecture to security operations.
- Explain the means attackers use to compromise systems and networks and defenses used by organizations.
- Apply international and domestic information security standards and compliance laws to real-world implementation in both the private and public sector.

Instructor's Communication Policy

Email Response Time

During the week I will attempt to respond to emails within 24 hours. Please understand that I have a fulltime job and travel frequently. I will be checking email periodically on weekends.

Office Hours

Please see my contact information under "Instructor Contact."

Overview of Course Structure

My primary role as your instructor is to be a facilitator for learning. I strive to create an inviting environment that challenges, yet supports, students. I presume that we will agree to the following: to collaborate and cooperate with each other, to participate in activities thoughtfully, and to listen and respond to one another respectfully. In addition, we will utilize the CCSNH netiquette statement to guide our online work and interactions.

Policies

Students registered for online courses must comply with all policies and guidelines (such as civil rights, disabilities services, harassment, and plagiarism) in the student handbook and other publications of the college offering the course. For more information, refer to: http://www.ccsnh.edu/about-ccsnh/board-policies-system-policies-and-fees

Assignments

Specific information for each assignment will be provided. You may post questions you have about assignments under the <u>Questions discussion board forum</u>.

I expect that all assignments will be turned in on time. Late assignments will be marked down at the instructor's discretion. Also, assignments that are more than two weeks overdue will not be accepted unless there are extenuating circumstances and alternative arrangements have been made.

Academic Honesty

Students are expected to uphold all College policies related to academic honesty. Please be sure you read and understand the section on academic integrity in the RVCC Student Handbook. Students are advised that their assignments may be submitted to SafeAssign.

The computer technology program has a very specific code of conduct. Lying, cheating, stealing or tolerating those in the program who do, is not acceptable.

Intellectual Property Rights

Students enrolled in this course that choose to continue past the course drop date with full refund 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 acknowledgment 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 at 542-7744, extension 5421, cdriesch@ccsnh.edu if you do not have a college plan or would like more information about disability services.

Netiquette

Students shall comply with CCSNH's Netiquette policy as articulated on the system web site.

Course Structure and Content

Most Assignments & Units will open on <u>Monday</u> and close on <u>Sunday</u>. There will, however, be some variations to this schedule due to holidays. Therefore, please be sure to read the directions for each week carefully. Deadlines are critical.

For this course there is a <u>Final Project</u>. The project will be introduced at the beginning of the course and you will have deliverables throughout the duration of the course. They are noted on the schedule below.

Week Due Date!!!	Topics	Reading & Assignments	Assignments Due
Week 1:	Introduction Chpt 1 – Information Systems Security	Chapter 1 Project	Chpt Discussion
Week 2:	Chpt 2 – Changing How People and Business Communicate	Chapter 2 Lab 1	Chpt Discussion Lab 1
Week 3:	Chpt 3 – Malicious Attacks, Threats, and Vulnerabilities	Chapter 3 Lab 2	Chpt Discussion Lab 2
Week 4:	Chpt 4 – The Drivers of the Information Security Business	Chapter 4 Assignment	Chpt Discussion Assignment
Week 5:	Chpt 5 – Access Controls Chpt 6 – Security Operations and Administration	Chapter 5 Lab 3 Chapter 6 Assignment	Chpt Discussions Lab 3 Assignment
Week 6:	Chpt 7 – Auditing, Testing, and Monitoring	Chapter 7 Lab 4	Chpt Discussion Lab 4
Week 7:	Chpt 8 - Risk, Response, and Recovery	Chapter 8 Lab 5	Chpt Discussion <u>Lab 5</u>
Week 8:	Mid-Term Exam (Chpts 1-8)	Mid-Term Ex	Mid-Term Exam

Week 9:	Chpt 9: Cryptography	Chapter 9 Lab 6	Chpt Discussion Lab 6
Week 10:	Chpt 10: Networks and Telecommunications	Chapter 10 Lab 7	Chpt Discussion Lab 7
Week 11:	Chpt 11: Malicious Code and Activity	Chapter 11	Chpt Discussion
Week 12:	Chpt 12: Information Security Standards	Chapter 12 Lab 8	Chpt Discussion Lab 8
Week 13:	Chpt 13: Information Security Education and Training	Chapter 13 Lab 9	Chpt Discussion Lab 9
Week 14:	Chpt 14: Information Security Professional Certifications	Chapter 14	Chpt Discussion
Week 15:	Chpt 15: US Compliance Laws	Chapter 15 Lab 10	Chpt Discussion Lab 10
Week 16:	Final Exam – (Chpts 9-15)	Final Exam	Final Project Due Final Exam

Assessment

Assignment:	Weight:	
Discussion	10%	
Assignment	12%	
Labs	20%	
Project	34%	
Exams	24%	
Total	100%	

Grading

Final grades will be assigned as follows:

Α	94 – 100
A-	90 – 93
B+	86 – 89
В	83 – 85
B-	80 – 82
C+	76 – 79
С	73 – 75
C-	70 – 72 (Non-Transferable)
D	60 – 69 (Essentially an F)
F	59 and Below

If a student has not participated in online activities for seven consecutive days, then he/she will be withdrawn from the course and will receive a grade of AF. (Please see the RVCC Student Handbook for more information on auxiliary grades.)

Conclusion: As your instructor, I am here to help you to succeed! Please, do not hesitate to contact me.

CAVEAT:

This syllabus is subject to change at any time at the instructor's discretion.

© 2008 Community College System of New Hampshire