CRN 11551 CST K275 Course Syllabus Spring 2011 (Tuesdays)

Information and Network Security

General Course Information

Course: CRN 11551, CST K275 Information and Network Security, Room B227

Hours: Lecture: 1720 -2005, Lab: 2010 - 2150

Instructor: Ronald Leask

Office: Three Rivers Community College Room C170

Office Hours: M, W 1530-1630 hours; T, R 0900-1200 hours

Office Phone: 860-885-2391

E-mail: rleask@trcc.commnet.edu, Please e-mail me if you cannot attend class

Textbook: 1). Corporate Computer and Network Security 2/e, Raymond R. Panko,

Prentice Hall/Pearson, 2010, ISBN -13-978-0-13-185475-8

Lab Manual: 2) Will make assignments in class.

Reference: Textbook,

COURSE OBJECTIVES: Prerequisite: CSA* K105 or permission of the instructor.

Students will become knowledgeable of basic network security. Topics include general security concepts, including authentication methods along with common network attacks and how to safeguard against them; communication security, including remote access, email, the Web, directory and file transfer, and wireless data; infrastructure security, including various network devices and media, and the proper use of perimeter topologies such as DMZs, extranets, and intranets to establish network security; cryptography basics, including the differences between asymmetric and symmetric algorithms, and the different types of PKI certificates and their usage; operational/organizational security, including its relationship to physical security, disaster recovery, and business continuity; and computer forensics.

Reference: Textbook(s), not required: Can be obtained from Amazon.com. (1) Network Security Essentials, Applications and Standards, Prentice Hall, William Stallings, 2011, ISBN-13: 978-0-13-610805-4

Course Outcomes: Students will:

- Learn how to develop and design a technical PowerPoint presentation(s) and present it to your peers.
- Understand the threat environment for computer networks and computers
- Understand the difference between symmetric and asymmetric cryptographic systems
- Understand differences between the standard cryptographic systems like VPNs, IPsec, SSL/TLS

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- Understand the use of authentications methods used for access control in computer networks and computers
- Understand basic firewalls types and their uses
- Understand what it means to harden a host or computer network
- Understand how to protect applications
- Understand how to document and respond to network incident

Overheads will distributed in class or put on mycommnet.

GRADING AND EVALUATION CRITERIA:

50% of grade is based on Homework/Lab assignments 50% of grade is based on end of chapter quizzes, and examinations Students are encouraged to keep a course notebook Syllabus is subject to change to correct errors and when new information becomes available.

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Week	Date	Chapter/Topic	Quizzes or Exams	Assignments /Labs
1	1/25/11	Course Overview and Module A, Network Concepts		HwLab 1
2	2/01/11	Ch 1 The Treat Environment: Attackers and their Attacks		HwLab 2
3	2/08/11	Ch2 Planning		HwLab 3
4	2/15/11	Ch3 The Elements of Cryptography		HwLab 4
5	2/22/11		Exam	
6	3/01/11	Ch4 Cryptography System Standards		HwLab 5
7	3/08/11	Ch5 Access Control		
8	3/22/11	Ch6 Firewalls		HwLab 6
	No Class	March 13-19 2011 Clas	ses Not In Se	ession
9	3/29/11		Exam	
10		Ch7 Host and Data Security		HwLab 7
11	4/05/11	Ch8 Application Security		HwLab 8
12	4/12/11	Ch9 Incident and Disaster Response		
13	4/19/11		Exam	
				HwLab 9
14	4/26/11			
15	5/03/11			
16	5/10/11			
	10	6 May 11 is Last Day of 15 V	Veek Session	
		22 May 11 is Commenc	ement	