

Introduction to Security

Course Syllabus

Course Title: Introduction to Security

Instructor: Chuck Easttom

Course Description:

A thorough introduction to computer and network security

Textbook(s):

Computer Security Fundamentals (Prentice Hall Security Series) (Paperback)

by Chuck Easttom (Author)

ISBN-10: 0131711296

Lesson Plan – by session

Session 1 : Introduction to Computer Security

- Threats to Network Security
- Terms
- Concepts and Approaches
- Laws about Network Security
- Security Resources
- The basics of networks and internet
 - Network Basics
 - How the internet works
 - History of the internet
 - Basic Network Utilities
 - Other Network Devices
 - Advanced Topics

Session 2: Cyber Stalking, Fraud, Industrial Espionage

- How Internet Fraud Works
- Laws about Internet Fraud
- Protecting Yourself Against Cyber Crime What Is Industrial Espionage?
- Spyware
- How to Protect Against Industrial Espionage

Session 3: Finding information about a target system

- Overview
- Port Scanners
- In Depth Searches

Session 4: Types of Attacks

- DOS
- Virus
- Trojan Horses

- Buffer Overflow
- Other

Session 5: Security Measures

- Securing an individual workstation
- Securing a server
- Securing a network
- Safe web surfing
- Assessing a system
- **Virus Scanners**
- Firewalls
- Intrusion Detection Software
- Anti Spyware

Session 6: Basics of Encryption

- History of Encryption
- Modern Methods
- Virtual Private Networks

Student Resources

- Cyber Crime <http://www.cybercrime.gov/>
- Computer Security www.cert.org
- Computer Crime Research resources <http://mailer.fsu.edu/~btf1553/ccrr/welcome.htm>
- Department of Justice Computer Crime
<http://www.usdoj.gov/criminal/cybercrime/compcrime.html>
- Department of Defense Cyber Crime <http://www.dcf.gov/home.asp>
- International Information Systems Security Certification Consortium
<https://www.isc2.org/cgi-bin/index.cgi>
- Computer Security Institute <http://www.gocsi.com/>
- Information Systems Security Association <http://www.issa.org/>
- The Network Security Library <http://secinf.net/>
- The Sans institute <http://www.sans.org/>

- Insecure's top 75 security tools <http://www.insecure.org/tools.html>
- CERT Coordination center <http://www.cert.org>