

BOROUGH OF MANHATTAN COMMUNITY COLLEGE

City University of New York

Department of Computer Information Systems

Title of Course: Introduction to Computer and Information Security
CIS 115
Spring 2008
Credits: 3

Class hours: 2
Lab hours: 2

Course Description:

This course provides an introduction to computer and information security. The significance of information integrity, availability and confidentiality are presented to demonstrate the importance of computer and information security. Students will gain practical skills on how to recognize threats and correct vulnerabilities. Techniques of detection, prevention and recovery from intrusions by malicious software will be taught with emphasis on concepts of organizational security through the institution of policies and procedures, and establishment of business and continuity planning.

Prerequisites/Co-requisites: ENG 088, ESL 062, ACR 094, MAT 010/ 011 or departmental approval.

Student Learning Outcomes:

After completing this course students will be able to:

- Explain the principles of computer and information security
- Recognize and avoid threats
- Discover and correct vulnerabilities
- Detect, prevent and recover from intrusions
- Identify the principles of organizational security.

Required Text & Readings

Textbook: **Security Awareness: Applying Practical Security in Your World, 2nd Edition**
Author: **Mark Ciampa**
Publisher: **Course Technology**
ISBN: **1-4188-0969-1**

Handouts on different topics will be also provided.

Other Resources: Diskettes or Flash drives (recommended).

Use of Technology (if applicable)

Evaluation & Requirements of Students

First Exam	20%
Second Exam	20%
Final Exam	30%
Quiz/Homework	20%
<u>Instructor's Evaluation</u>	<u>10%</u>
Total	100%

Outline of Topics:

1. Introduction to Security
 - Goals of information security
 - Information security strategies
 - Protect intellectual property.
 - Avoid legal consequences
 - Attacker profiles
 - How attackers attack?
 - Malicious code
 - Safeguarding a system
2. Personal Computer Security
 - Physical security
 - Biometrics
 - Cryptography
 - Authentication
 - Identity theft
 - Passwords: First line of defense
 - Computer backups
 - Computer virus identification & prevention
 - Operating systems security
3. Internet Security
 - The world wide web
 - Broadband vs. dialup Internet connection
 - Web attacks
 - Redirecting web traffic
 - Web security through browser settings
 - Web security through appropriate procedures
 - Vulnerabilities of e-mail
 - Email attachments
 - Spam email
 - Safe online shopping
4. Organizational Security
 - Cyber ethics
 - Security policy
 - Risk assessment
 - Threats to security
 - Threat and vulnerability assessment
 - Reduce risk
 - User responsibilities
 - Human resource procedures
 - Business continuity plan
 - Disaster recovery plan
5. Total Security
 - The security challenge
 - Prepare for attacks
 - Establish a frame work
 - Keep alerts
 - Know the enemy
 - Resist attack

College Attendance Policy

At BMCC, the maximum number of absences is limited to one more hour than the number of hours a class meets in one week. For example, you may be enrolled in a three-hour class. In that class, you would be allowed 4 hours of absence (not 4 days). In the case of excessive absences, the instructor has the option to lower the grade or assign an F or WU grade.

Academic Adjustments for Students with Disabilities

Students with disabilities who require reasonable accommodations or academic adjustments for this course must contact the Office of Services for Students with Disabilities. BMCC is committed to providing equal access to all programs and curricula to all students.

BMCC Policy on Plagiarism and Academic Integrity Statement

Plagiarism is the presentation of someone else's ideas, words or artistic, scientific, or technical work as one's own creation. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations, require citations to the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism.

Students who are unsure how and when to provide documentation are advised to consult with their instructors. The library has guides designed to help students to appropriately identify a cited work. The full policy can be found on BMCC's website, www.bmcc.cuny.edu. For further information on integrity and behavior, please consult the college bulletin (also available online).