

Common Course Outline
DCOM 258
Introduction to Information Security
3 Semester Hours

The Community College of Baltimore County

Description

DCOM 258 – 3 Credits – Introduction to Information Security serves the needs of students interested in understanding the field of Information Security and how it relates to other areas of Information Technology (IT). The material covered in this class provides the broad-based knowledge and skills necessary to prepare students for further study in specialized security fields, or may be used by those interested in a general introduction to the field. This course is also intended to serve the needs of those seeking to pass the Computing Technology Industry Association's (CompTIA) Security+ certification.

Prerequisite: DCOM 101 or PHIL 250 or consent of the program coordinator.

Overall Course Objectives

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

1. describe why information security is essential in today's IT environment;
2. identify the goals of information security;
3. describe common security threats and their ramifications;
4. determine the factors involved in developing a secure information security strategy;
5. identify common attacks and describe how to safeguard against them;
6. describe the basics of cryptography;
7. differentiate between physical security, disaster recovery, and business continuity;
8. describe computer forensics and its role in information security; and
9. demonstrate ethical behavior appropriate to security-related technologies.

Major Topics

- I. Introduction to Information Security
- II. System Threats and Risks
- III. Protecting Systems
- IV. Network Vulnerabilities, Attacks, and Defenses
- V. Wireless Network Security
- VI. Access Control Fundamentals
- VII. Authentication
- VIII. Performing Vulnerability Assessments and Audits
- IX. Basic Cryptography, Cryptographic Protocols, and Public Key Infrastructure (PKI)
- X. Business Continuity Planning and Procedures
- XI. Policies and Legislation

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

Minimum of six laboratory projects

Minimum of three exams

Writing: The individual faculty member will determine specific writing assignments, such as policies and procedures.

Other Course Information

This course is required for the Network Technology (DCOM) and Computer Information System (CINS) degree programs.

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