

# Common Course Outline

## DCOM 214

### Operating Systems Security

4 Credits

## Community College of Baltimore County

### Description

**DCOM 214 – Operating Systems Security** provides students with the hands-on skills needed to protect networks from the inside-out by focusing on Linux and Windows system hardening. The course is designed to help students prepare for professional careers in the information and communication technology (ICT) field and the Security Certified Network Professional (SCNP) certification exam. This course is the first step for the EC-Council Certified Ethical Hacker (CEH) exam preparation.

### **4 Credits**

**Prerequisite:** DCOM 142 or permission of the program coordinator

### Overall Course Objectives

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

1. describe the core concepts of cryptography, especially as they relate to information security;
2. utilize information security tools to harden systems;
3. harden Linux systems;
4. harden Windows systems;
5. perform a risk analysis on a simulated network;
6. research current security policies for governmental and non-governmental organizations;
7. analyze traffic using Wireshark; and
8. demonstrate ethical behavior appropriate to security-related technologies.

### Major Topics

- I. Cryptography and data security
- II. Certified Ethical Hacking tools and techniques utilizing EC-Council's iLabs
- III. Hardening Linux and Windows systems
- IV. Security on the Internet
- V. Risk analysis
- VI. Information security policies and procedures
- VII. Traffic analysis

**Course Requirements**

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

**Grading/exams**

- A minimum of six laboratory assignments
- A minimum of six quizzes
- A minimum of two exams

Written Assignments: Students are required to use appropriate academic resources. The individual faculty member will determine specific writing assignments, such as an Acceptable Usage Policy.

**Other Course Information**

This course is a program requirement for the Cyber Security degree. This course is taught in a computerized environment.

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