Common Course Outline
DCOM 215
Ethical Hacking and System Defense
4 Credits

Community College of Baltimore County

Description

DCOM 215 – Ethical Hacking and System Defense is the capstone course that combines an ethical hacking methodology with the hands-on application of security tools to help students secure their systems. Students are introduced to common countermeasures that effectively reduce and/or mitigate attacks. The course is designed to help students prepare for professional careers in the information and communication technology (ICT) field and prepare for industry recognized penetration testing certification exams. This course is the culminating course for the EC-Council Certified Ethical Hacker (CEH) exam preparation.

4 Credits

Prerequisites: DCOM 214 or permission of the program coordinator

Overall Course Objectives

Upon completion of this course students will be able to:
1. utilize various information security tools given different target systems in different environments;
2. discuss how the tools interrelate with each other in an overall penetration testing process;
3. implement countermeasures for various types of attacks;
4. use a common hacking methodology to carry out a penetration test;
5. analyze how penetration testing and ethical hacking fit into a comprehensive enterprise information security program; and
6. demonstrate ethical behavior appropriate to security-related technologies.

Major Topics
I. Ethical hacking
   II. Penetration testing
   III. Online hacking tools
   IV. Footprinting
   V. Scanning
   VI. Enumeration
   VII. Exploitation
   VIII. Post-exploitation
**Course Requirements**

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

**Grading/exams**
- A minimum of six laboratory projects
- 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.

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

Date Revised: 02/05/2019