**Common Course Outline**

**DCOM 215**

**Ethical Hacking and Systems Defense**

**4 Credits**

**The Community College of Baltimore County**

**Description**

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

**Overall Course Objectives**

Upon completion of the course the student 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**

1. Ethical Hacking
2. Penetration testing professional certifications
3. Online/print resources
4. Footprinting
5. Scanning
6. Enumeration
7. Exploitation
8. Post-exploitation

**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 an Acceptable Usage Policy.

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