

1. **COURSE TITLE\*: Ethical Hacking**
2. **CATALOG – PREFIX/COURSE NUMBER/COURSE SECTION\*: CYBR 2220**
3. **PREREQUISITE(S)\*: CYBR 1121** **COREQUISITE(S)\*: None**
4. **COURSE TIME/LOCATION/MODALITY: (Course Syllabus – Individual Instructor Specific)**
5. **CREDIT HOURS\*: 3** **LECTURE HOURS\*: 3**  
**LABORATORY HOURS\*: (contact hours)** **OBSERVATION HOURS\*:**
6. **FACULTY CONTACT INFORMATION: (Course Syllabus – Individual Instructor Specific)**
7. **COURSE DESCRIPTION\*:**

This course is designed for students who want to develop penetration testing skills to enable them to identify information-system vulnerabilities and effective remediation techniques for those vulnerabilities. This course is also designed for individuals who are preparing to take the CompTIA PenTest+ certification exam PT0-001, or who plan to use PenTest+ as the foundation for more advanced security certifications or career roles.

8. **LEARNING OUTCOMES\*:**

1. Plan and scope penetration tests.
2. Conduct passive reconnaissance.
3. Perform non-technical tests to gather information.
4. Conduct active reconnaissance.
5. Analyze vulnerabilities.
6. Penetrate networks.
7. Exploit host-based vulnerabilities.
8. Test applications.
9. Complete post-exploit tasks.
10. Analyze and report pen test results.

9. **ADOPTED TEXT(S)\*:**

The Official CompTIA PenTest+ Student Guide (Exam PT0-002) eBook  
ISBN: 978-1-64274-374-6

**9a: SUPPLEMENTAL TEXTS APPROVED BY FULL TIME DEPARTMENTAL FACULTY (INSTRUCTOR MUST NOTIFY THE BOOKSTORE BEFORE THE TEXTBOOK ORDERING DEADLINE DATE PRIOR TO ADOPTION) \*\*\*.**

**10. OTHER REQUIRED MATERIALS: (SEE APPENDIX C FOR TECHNOLOGY REQUEST FORM.)\*\***

CompTIA CertMaster Labs for PenTest+ (PT0-002) - Student Access Key  
 ISBN: 978-1-64274-390-6

**11. GRADING SCALE\*\*\*:**

Grading will follow the policy in the catalog. The scale is as follows:

- A: 90 – 100
- B: 80 – 89
- C: 70 – 79
- D: 60 – 69
- F: 0 – 59

**12. GRADING PROCEDURES OR ASSESSMENTS: (Course Syllabus – Individual Instructor Specific)**

<i>Category</i>	<b><u>EXAMPLE ONLY</u></b> <i>Total Points</i>	<i>% of Grade</i>
Chapter Assignments (10x30)	300	30%
Quizzes (10x20)	200	20%
Unit Exams (3x100)	300	30%
Assignments (5x10)	50	5%
Annual Report Project (100)	100	10%
Attendance	50	5%
Total	1000	100%

**13. COURSE METHODOLOGY: (Course Syllabus – Individual Instructor Specific)**

May include but not limited to: Lectures, independent and group projects, in-class and home assignments, tests, quizzes and lab exercises. This course must be offered on

campus. Attendance is required.

**14. COURSE OUTLINE: (Course Syllabus – Individual Instructor Specific)**

Week	Topics	Chapters	Learning Objectives
1	Planning and Scoping Penetration Tests	Chapter 1	1
2			
3	Conducting Passive Reconnaissance	Chapter 2	2
4	Performing Non-Technical Tests	Chapter 3	3
5			
6	Conducting Active Reconnaissance	Chapter 4	4
7	Analyzing Vulnerabilities	Chapter 5	5
8	Mid-Term Exam		
9	Penetrating Networks	Chapter 6	6
10	Exploiting Host-Based Vulnerabilities	Chapter 7	7
11			
12	Testing Applications	Chapter 8	8
13	Completing Post-Exploit Taks	Chapter 9	9
14	Analyzing and Reporting Pen Test Results	Chapter 10	10
15	Prep for Final Exam		
16	Final Exam – PenTest+ Exam		

**15. SPECIFIC MANAGEMENT REQUIREMENTS\*\*\*: None**

**16. FERPA:\***

Students need to understand that your work may be seen by others. Others may see your work when being distributed, during group project work, or if it is chosen for demonstration purposes. Students also need to know that there is a strong possibility that your work may be submitted to other entities for the purpose of plagiarism checks.

**17. DISABILITIES:\***

Students with disabilities may contact the Disability Services Office, Central Campus, at 800-628-7722 or 937-393-3431.

**18. OTHER INFORMATION\*\*\*:**

## **SYLLABUS TEMPLATE KEY**

\* Item cannot be altered from that which is included in the master syllabus approved by the Curriculum Committee.

\*\* Any alteration or addition must be approved by the Curriculum Committee

\*\*\* Item should begin with language as approved in the master syllabus but may be added to at the discretion of the faculty member.