# PORTFOLIO ASSESSMENT GUIDE for

# CYB 274 Cybersecurity IV

**What is a Portfolio**:

A Portfolio is a formal means of requesting assessment of your prior work/life experience from which you have developed sufficient college-level learning to earn credit for a specific class.

**Purpose of this Guide**:

This document is intended for student self-assessment purposes only. Review it carefully to determine if you are ready to write and submit a Portfolio for the course indicated above. Your self-assessment is not a guarantee that you will be awarded credit for the course. Faculty with expertise in the subject matter will evaluate whether your Portfolio provides sufficient evidence that you have demonstrated appropriate college-level mastery of the course content through experiential learning.

# General Guidelines:

* All work must be word-processed, except for documentation provided.
* Written portions should demonstrate college-level writing skills, including appropriate citations for any quoted or paraphrased material from other sources.
* Use the provided template, located on **page 3** of the guide, to format the portfolio appropriately.
* Your Portfolio will not be returned. Make copies of the contents before you submit. You may include clear copies of documentation and keep the originals.
* Submit your completed Portfolio, along with the approved Course Portfolio Assessment Form, to the Adult Learning Programs Office.

# Determination of Portfolio Assessment Outcome:

You will need to do the following to be awarded credit through Portfolio Assessment for this course:

* Provide all required documentation as listed within the template to support the Learning Outcomes.
* Possibly participate in an interview with the Portfolio evaluator.
* When evaluated, students must demonstrate experience or proficiency in >=70% to earn credit in the course.

|  |  |
| --- | --- |
| [Course Number]: Portfolio Assessment | |
| Skill/Outcome | Score |
|  |  |
| **Provide documentation of successfully passing the CompTIA Cybersecurity Analyst (CySA+) certification exam** | 100 |
|  |  |
| In extenuating circumstances competencies can be met through extensive industry experience confirmed by employer |  |
| Total Score | /100 |



CREDIT FOR PRIOR LEARNING PORTFOLIO

[COURSE NUMBER AND TITLE]

[DATE]

BY

[YOUR NAME]

Table of Contents

Contents

[Statement of Academic Honesty 3](#_Toc90467075)

[Course Description 3](#_Toc90467076)

[Learning Outcomes 4](#_Toc90467076)

[Educational Goals 5](#_Toc90467077)

[Chronological Resume 6](#_Toc90467078)

[Learning and Experience Autobiography 7](#_Toc90467079)

[Acquired Learning and Knowledge Narrative 8](#_Toc90467080)

[Bibliography 9](#_Toc90467081)

[Documentation 9](#_Toc90467082)

Statement of Academic Honesty

The material contained in this Portfolio honestly and accurately reflects my life, learning, and work experience. I understand that the penalty for falsifying any information or documentation will result in an award of no credit for the Portfolio with no resubmission allowed and may result in other sanctions as described in the Student Code of Conduct.

Print Name LCSC ID Number

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Date

Course Description

**CYB-274 Cybersecurity IV - 4 Credits**

In this course students will learn and be able to apply the appropriate incident response procedures, analyze potential indicators of compromise, and utilize basic digital forensics techniques. This course provides students with the ability required to capture, monitor, and respond to network traffic findings along with software and application security; automation, threat hunting, and IT regulatory compliance. This course will allow students to gain the skills required to pass the CompTIA Cybersecurity Analyst (CySA+) course and lab.

Pre-Req: CYB 273

Learning Outcomes

1. Set up a Honeypot on Kali Linux
2. Use the iptables Command to Create a Personal Firewall in Linux
3. Use the hping Program
4. Scan the Local Network
5. Perform Reconnaissance on a Network
6. Identify Search Options in Metasploit
7. Make Syslog Entries Readable
8. Use nslookup for Passive Reconnaissance
9. Conduct Vulnerability Scanning Using Nessus
10. Use OWASP ZAP
11. Inspect the Vulnerability in the Echo Server's Source Code
12. Perform Session Hijacking Using Burp Suite
13. Use Nikto
14. Perform Vulnerability Scanning Using OpenVAS
15. Exploit a Website Using SQL Injection
16. Perform a MITM Attack
17. Detect Rootkits
18. Exploit LDAP-Based Authentication
19. Encrypt and Decrypt Messages Using Kleopatra
20. Encrypt and Decrypt a File Using AES Crypt
21. Download and Install Wireshark
22. Configure Snort
23. Simulate the DDoS Attack
24. Confirm the Spoofing Attack in Wireshark
25. Capture a Packet Using Wireshark
26. Perform a Memory-Based Attack
27. Examine Audited Events
28. Enable Logging for Audited Objects
29. Use the MD5 Hash Algorithm
30. Use Apktool to Decode and Analyze the apk File

Topics Covered:

* Cybersecurity Analyst
* Threat Intelligence
* Reconnaissance and Intelligence Gathering
* Designing a Vulnerability Management Program
* Analyzing Vulnerability Scans
* Cloud Security
* Infrastructure Security and Controls
* Identity and Access Management Security
* Software and Hardware Development Security
* Security Operations and Monitoring
* Building an Incident Response Program
* Indicators of Compromise
* Forensic Analysis
* Containment, Eradication, and Recovery
* Risk Management
* Policy and Compliance

Educational Goals

**Goals, Motivation, and Time Frame**

What are your goals? What are the reasons (professional and personal) you are pursuing your goals? What is a realistic time frame for completing your education?

**Prior Learning to Goals**

How will the prior learning credit you are requesting fit into your future educational and career goals?

Chronological Resume

Include a chronological resume that will support your request for prior learning. List all jobs held, including volunteer work, as they relate to the course that you are trying to receive credit. List duties, skills and expertise used in performing job tasks. When possible, use language similar to that used in the Learning Outcomes for the course.

Examples of Experience:

* Employment, Work Experience
* Workshops, Webinars, Training, Seminars, Professional Development
* Volunteer Activities, Community Service, Committees, Groups
* Military Experience, Occupations, Training
* Licenses, Certificates, Industry Credentials
* Non-credit Courses
* Publications

Learning and Experience Autobiography

The autobiography will serve as an introduction to the evaluator and help them understand the context of your learning for the particular course you are requesting. It is a complete picture of you and your experiences as it relates to the course for which you are creating this portfolio. Relate the relevant experiences to the course in a general explanation (Specifics will be included in the Acquired Learning and Knowledge Narrative). Demonstrate why you have selected this particular course and detail your work and life experiences using your resume as a guide.

This should be two+ pages and summarize the significant learning experiences in your life and describe how your experiences will validate your knowledge of the course content and meet the course outcomes being petitioned for credit.

Acquired Learning and Knowledge Narrative

The narrative is a detailed explanation of how your activities and the resulting competencies were achieved. This is to complement your resume and autobiography. Be sure to link your accomplishments to the course learning outcomes. This will be similar to your autobiography but will detail your chronological work and life experience history while focusing on the things you have already learned through training and experiences, as it relates to your target course.

Note that a key goal of this section is the learning process itself as you reflect on how your experience relates to key concepts within the learning outcomes in the target course. Clearly focus on the learning objectives (what you know and can do) rather than the experience.

For each experience indicated within the Portfolio, the student must:

* Label each heading, Learning Outcome 1, Learning Outcome 2, etc.
* Include the experience; time spent in activity; description of duties and activities.
* Describe the learning and how it relates to the Learning Outcomes for the course.
* Describe how the learning was acquired.
* Provide documentation as evidence of the experience in relation to the course learning outcomes, and as an indication of the level and appropriateness of content.
* Describe how this experience has influenced and impacted other areas of your life.

This will be 2+ pages in length. Make sure it is clear, concise, and free of errors in sentence structure, grammar, and spelling. It needs to demonstrate college-level writing and critical thinking.

Bibliography

**This is not required.** The bibliography will include any reading done on the course subject. If you have studied manuals or used other texts to gain your prior learning, include them here. References should be cited in American Psychological Association (APA) style, but your instructor may suggest another format.

Documentation

Each of your experiences and competencies will require verification (evidence). This evidence can take several forms:

* Completion of training programs, workshops, seminars, etc., may be verified through:
  + Certificates
  + Personnel records
* Performance reviews showing competencies
* Job descriptions
* Transcripts
* Samples of work
* A videotape of your speech, theatre work, or music recital
* Licenses
* Honors or Awards
* Samples of your painting, drawing, photography, or ceramics for a studio art course
* Certificates of attendance
* Letters of verification listing proven competencies from instructors or employers
* Products designed or created by you
* Military records

Each piece of documentation for a workshop or training program must be accompanied by a description page of content for each workshop, training program, or seminar and must show how the evidence relates to the course learning outcomes.