2023-2024 Assessment Plan

Cybersecurity, Virtualization, and Networking

Academic year 2023-2024

Cybersecurity, Virtualization, and Networking Learning Outcomes

Cybersecurity Fundamentals

Identify basic cybersecurity terminology, types of cybercrimes, and risk strategies.

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.
We will measure the course grade for students who are still enrolled after the second week of school, because students who are not able to complete for various reasons. don't always withdraw or get dropped right away.		
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Indirect - Overall Course Grade		
Security Fundamentals: CVNP 2615		
Target		
60% of students will earn a C grade or better.		
Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Security Fundamentals: CVNP 2615		
Target		
70% of students will score a 70% or better.		

Networking Fundamentals

Demonstrate an understanding of NICs, identify different physical and logical characteristics of network connections, demonstrate configuration of routers and switches, demonstrate use of remote access, and understand all types of wired and wireless communications.

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.
We will measure the course grade for students who are still enrolled after the second week of school, because students who are not able to complete for various reasons don't always withdraw or get dropped right away.		
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Indirect - Overall Course Grade		
Cisco 1: CVNP 1603		
Target		
60% of students will earn a C grade or better.		

Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Cisco 1: CVNP 1603		
Target		
70% of students will score a 70% or better on the Final Exam for Cisco 1.		

Computer and Peripheral Hardware

Demonstrate an understanding of the function and design of computer hardware components and associated peripheral devices, including support of computers and peripherals.

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.
We will measure the course grade for students who are still enrolled after the second week of school, because students who are not able to complete for various reasons don't always withdraw or get dropped right away.		
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Indirect - Overall Course Grade		
Computer Hardware: CVNP 2626		
Target		
60% of students will earn a C grade or better.		
Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Computer Hardware: CVNP 2626		
Target		
70% of students will score a 70% or better.		

Desktop Operating Systems

Students will demonstrate understanding of Windows and Linux operating systems, including configuration and troubleshooting,

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.
We will measure the course grade for students who are still enrolled after the second week of school, because students who are not able to complete for various reasons don't always withdraw or get dropped right away. Implementation Plan (timeline) Fall or Spring		

Key/Responsible Personnel Cybersecurity Faculty Indirect - Overall Course Grade		
Supporting Windows Operating Systems: CVNP 1606		
Target		
60% of students will earn a C grade or better.		
Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Supporting Windows Operating Systems: CVNP 1606		
Target		
70% of students will score a 70% or better.		

Virtual and Cloud Computing

Demonstrate ability to create and manage virtual machines. Demonstrate ability to use Kubernetes to manage a cluster of containers. Troubleshoot and tune virtual machines for specific use cases.

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Indirect - Overall Course Grade		
Virtual Computing: CVNP 2601		
Target		
60% of students will earn a C grade or better.		
Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Virtual Computing: CVNP 2601		
Target		
70% of students will score 70% or better.		

Advanced Cybersecurity

This includes offensive security, defensive security and cyber forensics, and network based security controls and policies. Demonstrate ability to read logs, engineer detections in various cyber tools, collect and analyze endpoint data, and knowledge of the incident handling process

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		

Key/Responsible Personnel Cybersecurity Faculty Indirect - Overall Course Grade Defensive Security: CVNP 2625		
Target 60% of students will earn a C grade or better		
Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Defensive Security: CVNP 2625		
Target		
70% of students will score 70% or better.		

Linux Fundamentals

Demonstrate use of Linux command line and installing/configuring Linux systems.

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.
We will measure the course grade for students who are still enrolled the after second week of school.		
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Indirect - Overall Course Grade		
Linux Administration: CVNP 1601		
Target		
60% of students will earn a C grade or better.		
Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Linux Administration: CVNP 1601		
Target		
70% of students will score a 70% or better.		

Python and Scripting

Demonstrate foundational knowledge of Python concepts. Create scripts to automate processes using Python. Leverage programming languages to script out repetitive tasks.

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.

Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Indirect - Overall Course Grade		
Python/JSON: CVNP 2646		
Target		
70% of students will earn a C grade or better.		
Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Python/JSON: CVNP 2646		
Target		
70% of students will score 70% or better.		

Network Systems Administration

Demonstrate ability to manage network level tools. Troubleshoot network based issues. Demonstrate knowledge of common network services and ports and protocols.

MEASURES	RESULTS	ACTIONS
Course Grade	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Indirect - Overall Course Grade		
Advanced Network Operating System: CVNP 2603		
Target		
70% of students will earn a C grade or better.		
Final Exam - Written	No results have been added.	No actions have been added.
Implementation Plan (timeline) Fall or Spring		
Key/Responsible Personnel Cybersecurity Faculty		
Direct - Exam (Course)		
Advanced Network Operating System: CVNP 2603		
Target		
70% of students will score 70% or better.		

Workplace Readiness

Students demonstrate the knowledge, skills, and abilities required to enter the workforce.

MEASURES	RESULTS	ACTIONS
Comprehensive CVN Program Exam	No results have been added.	No actions have been added.

Students will complete a comprehensive exam that covers objectives in the Cybersecurity, Virtualization and Networking program. This will occur in their last semester of the program.	
Direct - Exam (Course)	
Target	
70% of students will score a 70% or better on the comprehensive program exam	