

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. CST

COURSE NUMBER: 2430

NUMBER OF CREDITS: 3

Lecture: 2 Lab: 1 OJT: 0

<b>Course Title:</b>
CyberOps

<b>Catalog Description:</b>
CyberOps covers knowledge and skills needed to successfully handle the tasks, duties, and responsibilities of an associate-level Cybersecurity Analyst working in a Security Operations Center (SOC). This course aligns with the Cisco Certified CyberOps Associate (CBROPS) certification. Candidates need to pass the 200-201 CBROPS exam to achieve the Cisco Certified CyberOps Associate certification. Taking certification is not mandatory requirement for this course. The CBROPS exam tests a candidate's knowledge and skills related to security concepts, security monitoring, host-based analysis, network intrusion analysis, and security policies and procedures.

<b>Prerequisites or Necessary Entry Skills/Knowledge:</b>
CST 1200.

**FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)**

- ☐ Goal 1: Communication: By meeting the following competencies:
- ☐ Goal 2: Critical Thinking: By meeting the following competencies:
- ☐ Goal 3: Natural Sciences: By meeting the following competencies:
- ☐ Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- ☐ Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- ☐ Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- ☐ Goal 7: Human Diversity: By meeting the following competencies:
- ☐ Goal 8: Global Perspective: By meeting the following competencies:
- ☐ Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- ☐ Goal 10: People and the Environment: By meeting the following competencies:

<b>Topics to be Covered</b>
Security Concepts
Security monitoring
Host-based analysis
Network Intrusion Analysis
Security policies and procedures

## Student Learning Outcomes

Install virtual machines to create a safe environment for implements and analyzing cybersecurity threat events.

Explain the roll of Cybersecurity Operations Analyst in the enterprise.

Analyze the operation of network protocols and services.

Explain network intrusion data to identify compromised hosts.

Classify the various types of network attacks.

Explain how to investigate endpoint vulnerabilities and attacks.

Analyze network intrusion data to identify compromised hosts.

Apply incident response models to manage network security incidents.

**Is this course part of a transfer pathway:** Yes ☐ No ☒

**\*If yes, please list the competencies below**

Revised Date: 4/14/2022