

SUSSEX COUNTY COMMUNITY COLLEGE

Master College Syllabus

COMS141	Linux Fundamentals for Cybersecurity	
COURSE #	COURSE TITLE	CLASSIFICATION
3	2	2
CREDITS	CLASS HOURS	LAB HOURS

RECOMMENDED TEXTS:

Title: Linux Essentials for Cybersecurity
Author: Rothwell & Pheils
Publisher: Pearson
Edition/Date: 2018

CATALOG DESCRIPTION

This course supplies critical knowledge for securing a Linux operating and also for using cybersecurity tools as a basis for future study in forensics. In a lab setting, concepts introduced range from proper set-up and installation of accounts through administration of devices, services, and processes – all with a focus on security through scripting.

Lab Fee required

TOPICS TO BE INCLUDED

1. Key components of Linux os and command line elements
2. Management of groups and account security
3. Management of file permissions
4. Management of local and network storage design and security
5. Common automation security tasks through scripting
6. Process control and security
7. Software management
8. Security tasks such as footprinting, firewalls, and intrusion detection

COURSE COMPETENCIES/LEARNING OUTCOMES

In a manner deemed appropriate by the instructor and approved by the department, students will be able to:

1. Explain the basics of the Linux OS. (A.S. in Computer Operating Systems, Program Goals 2,3,5)
2. Examine the fundamentals of Linux scripting (A.S. Computer Information Systems, Program Goal 1, 2, 7)
3. Apply Linux to secure groups, files, storage, and processes (A.S. Computer Information Systems, Program Goal 1, 2, 7)
4. Utilize Linux to manage software (A.S. Computer Information Systems, Program Goal 1, 2, 7)
5. Discover vulnerabilities in logging in procedures (A.S. Computer Information Systems, Program Goal 1, 2, 7)
6. Inspect how security measures work on a network. (A.S. Computer Information Systems, Program Goal 1, 2, 7)