CPS493/06, CPS593/03 - Managing Linux Environments

Course Details

Credit Hours: 3

Class Days, Time, Location: *Wednesdays*: 12.30 - 3.20 PM, SH259

Course Modality: Fully Seated

Pre -requisites: PI

Instructor Details

Name and Title: Chirakkal Easwaran, Professor

Pronouns: He

Campus Email: easwarac@newpaltz.edu

Office Phone: 845-257-3514

Office Location: SH 244

Office Hours: Monday 12.30 PM – 2.30 PM, Thursday 12.30 – 2.30 PM and by appointment (please email me to make appointments).

Course Description

This course is a practical, hands-on introduction to setting up and managing networked, multi-user Linux environments. Topics to be covered include but are not limited to: Configure kernel parameters. Manage and schedule jobs. Install and configure services. Network configuration, packet filtering, port redirection, and NAT. Virtual machines with libvirt.   Manage users and personal and system-wide environment profiles. Throughout the course you will also learn how to write bash scripts to automate many system administration jobs.

Grad section will also include: Configuring container engines, creating and managing containers, securing them and exposing container services.

Student Learning Outcomes (SLO)

Upon completion of this course, students will be able to install, administer and secure a full-fledged Linux system complete with various servers and services.

Reading Materials

I will provide notes as necessary and post links to additional reading materials. There are no required text books for the course.

Attendance
Attendance is mandatory, as it is a hands on class. In every class you will be doing some hardware/software tasks, and documenting extensively.
Medical emergencies will be individually accommodated.

Please see the following for additional campus-wide policies on attendance.
Religious Beliefs & Class Attendance
Black Solidarity Day

Grading Information

Lab Notebook – 50% for 493, 30% for 593
Because of the nature of the course the major part of assessment will be through your logs in the lab book you will be expected to keep documenting class activities.

Midterm – October 8, 2025 - 25%

Final – 25%
The final   will be accomplishing a set of tasks on a fresh linux installation. Details will be provided in class.

Additional expectation for graduate students taking 593 sections – 20%

Complete Project I will assign based on the linux system details you learned. I will provide details later. This will constitute 20% of your total.

Grade Scale (by percentage)

A	100 – 93	A-	92.9 – 90
B+	89.9 – 87.5	B	87.4 – 82.6
B-	82.5 – 80	C+	79.9 – 77.5

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C	77.4 – 72.6	C-	72.5 – 70
D+	69.9 – 67.5	D	67.4 – 62.6
D-	62.5 – 60	F	Below 60

Campus Policies

Please be aware of the most **current Campus Policies** applicable to issues such as Academic Integrity, Computer/Network Use, Identity Verification, Accommodation of Individuals with Disabilities, Title IX, and Veteran & Military Services.

Last Day to Withdraw without Grade Penalty
November 14, 2025

Last Day to opt for S/U option
December 8, 2025

Student Evaluation of Instruction (SEI)
You are responsible for completing the Student Evaluation of Instruction (SEI) for this course and for all your courses with an enrollment of five (5) or more students. I value your feedback and use it to improve my teaching and planning. Please complete the online form during the appropriate period: November 27 – December 11 (Fall 2023).

Basic Needs
To learn effectively you must have basic security: a roof over your head, a safe place to sleep, enough food to eat. The **Division of Student Affairs** has compiled a broad range of resources, including a **list of campus services, local agencies, and support networks**, that can assist students with managing their basic needs. Please consult these resources or **contact the Division of Student Affairs** should you need additional information.

Names & Pronouns
SUNY New Paltz recognizes the importance of a diverse student body, and we are committed to fostering equitable classroom environments. You are invited to share how you want to be referred to, both in terms of your name and your pronouns (he/him, she/her, they/them, etc.). I will do my best to address and refer to all students accordingly and will support you in doing so as well. In this classroom, we will respect and refer to people using the names and personal pronouns that they share.

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Taking Care: Illness and Absences

While the national COVID-19 public health emergency has ended, SUNY New Paltz still has policies in place to protect the health of our community. **Click here to view COVID-19 FAQs and up-to-date information about those policies**.

Students with an illness that prevents them from attending class (COVID-19, influenza, etc.) should exercise self-care and consult the testing recommendations on the **Student Health Service (SHS) website**. Faculty will receive "professor notes" from the SHS when a student has an illness that prevents them from attending class.