



Jordan University of Science and Technology
Faculty of Computer & Information Technology
Cybersecurity Department

CY371 Linux Operating System Laboratory - JNQF Level: 7

Second Semester 2023-2024

Course Catalog

1 Credit Hours. This course covers some topics of the Linux operating system, such as file systems, commands, utilities, text editing, shell programming, and text processing utilities. Also, basic Linux commands and programs, compilers, and the ?make? facility, automated common system tasks using shell scripts.

Teaching Method: Electronic Course

Text Book

Title	LINUX BASICS FOR HACKERS Getting Started with Networking, Scripting, and Security in Kali
Author(s)	OccupyTheWeb
Edition	1st Edition
Short Name	Ref #2
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref #1	Linux Essentials for Cybersecurity	William Rothwell Denise Kinsey	3rd Edition	

Instructor

Name	Dr. Hala Hamadeh
Office Location	CH1 L2
Office Hours	Sun : 11:30 - 12:45 Mon : 08:30 - 08:45 Tue : 11:30 - 12:45 Thu : 08:30 - 10:30 Thu : 11:30 - 12:45
Email	hmhamadeh@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Sun : 17:00 - 19:00 Room: متزامن الحضور منصة الكترونية
Section 2: Lecture Time: Mon : 17:00 - 19:00 Room: متزامن الحضور منصة الكترونية

Prerequisites		
Line Number	Course Name	Prerequisite Type
1733750	CS375 Operating Systems	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Installing Linux	From Ref #1
Weeks 2, 3	Introduction to Linux commands	From Ref #1
Week 4	Text Manipulation	From Ref #2
Weeks 5, 6	Controlling File and Directory Permissions	From Ref #2
Week 7	Process Management	From Ref #2
Weeks 8, 9	Managing User Environment Variables	From Ref #2
Weeks 10, 11	Bash Scripting	From Ref #2
Week 12	Filesystem and Storage Device Management	From Ref #2
Week 13	Processes & job scheduling	From Ref #1
Week 14	The Logging System	From Ref #2
Week 15	Becoming Secure and Anonymous	From Ref #2
Week 16	Final Exam	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Demonstrate Proficiency in Linux Fundamentals; Students will be able to recall and explain key concepts related to the Linux operating system, including its file system, commands, and utilities. [1SO1] [1L7K1]	20%	Midterm, Labs, Final Exam
Apply Linux Commands; Students will understand and utilize basic Linux commands for effective system navigation and management. [1SO1] [1L7K1]	20%	Midterm, Labs, Final Exam

Manage Linux Operations; Students will be able to manage filesystems and storage devices, processes, job scheduling, and logging systems in Linux. [1SO2] [1L7S1]	30%	Midterm, Labs, Final Exam
Create and Execute Shell Scripts; Students will be able to design, develop, and execute shell scripts, showcasing the ability to automate complex system tasks efficiently. [1SO2] [1L7S1]	30%	Labs, Final Exam

Relationship to Program Student Outcomes (Out of 100%)					
SO1	SO2	SO3	SO4	SO5	SO6
40	60				

Relationship to NQF Outcomes (Out of 100%)	
L7K1	L7S1
40	60

Evaluation	
Assessment Tool	Weight
Midterm	30%
Labs	30%
Final Exam	40%

Policy	
Makeups	Makeup exam should not be given unless there is a valid excuse
Cheating	Standard JUST policy will be applied.
Attendance	Excellent attendance is expected. According to the JUST policy, a student will receive a grade of ZERO (35%) failed for absence if he misses more than 20% of the classes. Attendance will be taken by calling the names or passing a sign-up sheet. If you miss a class, it is your responsibility to find out about any announcements or assignments you may have missed.
Participation	Participation in the class will positively affect your performance. Disruption and side talks will possibly result in dismissal from class. No eating or chewing gums are allowed in class.

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