



Course Specifications

Course Title:	Operating System 2
Course Code:	CP43
Program:	Diploma in Programming and Computer Science
Department:	Technology department
College:	Applied College
Institution:	Taif University

Table of Contents

A. Course Identification	3
6. Mode of Instruction (mark all that apply)	3
B. Course Objectives and Learning Outcomes	3
1. Course Description	3
2. Course Main Objective.....	3
3. Course Learning Outcomes	3
C. Course Content	4
D. Teaching and Assessment	4
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods	4
2. Assessment Tasks for Students	5
E. Student Academic Counseling and Support	5
F. Learning Resources and Facilities	5
1. Learning Resources	6
2. Facilities Required.....	6
G. Course Quality Evaluation	6
H. Specification Approval Data	7

A. Course Identification

1. Credit hours:	4
2. Course type	
a.	University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: Second Year Forth Level	
4. Pre-requisites for this course (if any): CP32-Operating System 1	
5. Co-requisites for this course (if any): None	

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	4	100%
2	Blended		
3	E-learning		
4	Distance learning		
5	Other		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	60
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	60

B. Course Objectives and Learning Outcomes

1. Course Description

In this course on Introduction to Operating systems, students are taught basic concepts of Linux architecture and commands, such as, kernel, system call, file system, command lines, managing users and groups, monitoring and processes, and controlling services and daemons. The course introduces and aims to provide fluency of students in Linux.

2. Course Main Objective

This course provides an introduction to Linux OS design and architecture: file system, kernel, hard-disks and devices. Students at the end of this course are able to work on Linux OS as a user in both command-line and graphical modes, as well as understand Linux OS as a system administrator in command-line mode.

3. Course Learning Outcomes

CLOs	Aligned PLOs

CLOs		Aligned PLOs
1	Knowledge and Understanding	
1.1	Specify basic concepts of Linux architecture and commands	K1
1.2	Use command line to create/edit/delete files and folders.	K2
1.3	Use command line to manage user, group, and privilege.	
1.4	Use command to line to manage OS processes, services and, daemons.	
2	Skills :	
2.1	Choose the relevant software (operating systems and applications) for personal and production environments either proprietary or open source.	S2
2.2	Work on Linux as a user in both command-line and graphical modes.	S2
2.3	Write Shell and Linux commands to perform files/folders, users, and process management.	S2
3	Values:	

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Linux What is OS? Types of OS Advantage and disadvantage of OS Task and responsibilities of OS	4
2	Linux Architecture Kernel System call File system	4
3	Accessing the Command Line and Getting help in Linux	8
4	Managing Files from the Command Line	8
5	Creating, Viewing, and Editing Text Files	8
6	Managing Local Linux Users and Groups	8
7	Controlling Access to Files with Linux File System	8
8	Monitoring and Managing Linux Process	8
9	Controlling Services and Daemons	4
Total		60

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Specify basic concepts of Linux architecture and commands	Lectures	Quizzes Exams Homework Evaluation
1.2	Use command line to create/edit/delete files and folders.		
1.3	Use command line to manage user, group, and privilege.		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.4	Use command to line to manage OS processes, services and, daemons.		
2.0	Skills		
2.1	Choose the relevant software (operating systems and applications) for personal and production environments either proprietary or open source.	Lectures	Quizzes Exams Homework Evaluation
2.2	Work on Linux as a user in both command-line and graphical modes.	Lectures	Quizzes / Homework Project / Exams
2.3	Install Linux and to perform system administration tasks.	Lectures	Quizzes Exams Homework Evaluation
2.4	Understand and write shell scripts.	Lectures	Quizzes Exams Homework Evaluation
2.5	Write Linux commands to perform files/folders, users, and process management.	Lectures	Quizzes / Homework Project / Exams
3.0	Values		

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Home Works/Student Participation-Arrival/quiz	Every Week	15%
2	Project	From week 3 to week 8	5%
3	Mid-Term Assignment	6 7	20% 10%
4	Final Examination	12	50%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

- Providing a guide for each group of students, and distributing student lists electronically to faculty members.
- There is an academic advising guide that defines the role of the faculty member in the academic advising process.
- The program supervisor is available throughout the year to answer student inquiries.
- Availability of full information about the program and its members and ways to communicate with them.
- Use the Learning Management System (Black Board) to communicate with students

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	Linux Bible 9th Edition. ISBN-13: 978-1118999875
Essential References Materials	<ul style="list-style-type: none"> Linux in a Nutshell: A Desktop Quick Reference Sixth Edition ISBN-13: 978-0596154486
Electronic Materials	<ul style="list-style-type: none"> http://www.linux-tutorial.info/. Online edition. The Linux Command Line by William Shotts. Online edition
Other Learning Materials	<ul style="list-style-type: none"> https://tutorials.ubuntu.com/ https://www.linuxtopia.org/online_books/linux_for_beginners_in_dex.html https://www.edx.org/school/red-hat

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	<ul style="list-style-type: none"> Classroom with 25 chairs
Technology Resources (AV, data show, Smart Board, software, etc.)	<ul style="list-style-type: none"> Video projector / data show White board
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Null

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching	<ul style="list-style-type: none"> Students Faculty members Coordinator Curriculum Committees 	<ul style="list-style-type: none"> Course exit survey Feedback from Faculty members Feedback from Course Coordinator Feedback from council
Effectiveness of assessment	<ul style="list-style-type: none"> Students Faculty members Coordinator Council Curriculum Committees 	<ul style="list-style-type: none"> Course exit survey Feedback from Faculty members Feedback from Course Coordinator Feedback from council Feedback from Curriculum Committees
Extent of course achievement	<ul style="list-style-type: none"> Students Faculty members Council Curriculum Committees 	<ul style="list-style-type: none"> Course exit survey Feedback from Faculty members Feedback from council Feedback from

Evaluation Areas/Issues	Evaluators	Evaluation Methods
		Curriculum Committees
Extent of course learning outcomes	<ul style="list-style-type: none"> • Students • Faculty members • Council • Curriculum Committees 	<ul style="list-style-type: none"> • Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council • Feedback from Curriculum Committees
Quality of learning resources	<ul style="list-style-type: none"> • Students • Faculty members • Coordinator • Council • Curriculum Committees 	<ul style="list-style-type: none"> • Course exit survey • Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council • Feedback from Curriculum Committees

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	