اعتماد
NCAAA

T4
2020

Course Specifications

Course Title:	Operating System1
Course Code:	CP32
Program:	Diploma in Programming and Computer Science
Department:	Technology department
College:	Applied College
Institution:	Taif University

Table of Contents

A. Course Identification

1. Credit hours:	4

2. Course type

a. University ☐ College ☐ Department ✔ Others ☐

b. Required ✔ Elective ☐

3. Level/year at which this course is offered: First Year Third Level

4. Pre-requisites for this course (if any)**:**

5. Co-requisites for this course (if any)**:**

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

The course deals with the concept of computer operating systems, their importance, history, types and features, and the tasks of operating systems such as managing processors, software, operations and problems, managing memory of all kinds and its software, managing input and output units and their software, and managing files and their systems. It also deals with the classification of operating systems in terms of tasks and purposes, the number of users, and a comparison between commonly used operating systems.

2. Course MainObjective

Introducing the student to operating systems, their importance, components, and roles for the computer, also introducing the student to the techniques of memory management in the computer system, comparing them and his understanding of the strategies of the central processing unit in the computer system, as well as managing the operating system for storage units and files and the skill of dealing with the operating system.

3. Course Learning Outcomes

	CLOs	AlignedPLOs
1	**Knowledge and Understanding**	
1.1	Knows the importance of the operating system, its components, and its roles for the computer	K1
1.2	Classifies the techniques of memory management, storage units, and files in the computer system and compares them	K2
2	**Skills :**	
2.1	Exercises skills dealing with operating system and CPU management strategies.	S1
3	**Values:**	
3.1	Fluent in teamwork and cooperation within the computer maintenance team	V1

C. Course Content

No	List of Topics	Contact Hours
1	The role of software in general and the operating system, especially in the computer.	4
2	The role of software in general and the operating system, especially in the computer.	4
3	The importance of memory management and its impact on the performance of the computer	8
4	Methods of memory management and the advantages and disadvantages of each method and its basic requirements.	8
5	CPU management, business scheduling, operations scheduling, multiprocessor computing systems, processor and process related problems.	8
6	File concept, file manager, file system structure, file operations, file typesand characteristics, directory structure, space allocation methods, free space management.	8
7	Large storage media architecture, hard disk drives, disk scheduling, partitions, disk management, swap space management.	8
8	Windows 10 setting and control panel	8
9	Review the scientific content that has been taught	4
	Total	**60**

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

Code	Course Learning Outcomes	TeachingStrategies	AssessmentMethods
1.0	**Knowledge and Understanding**		
1.1	Knows the importance of the operating system, its components, and its roles for the computer	Lectures	Quizzes Exams Homework Evaluation
1.2	Classifies the techniques of memory management, storage units, and files in		

Code	Course Learning Outcomes	TeachingStrategies	AssessmentMethods
	the computer system and compares them		
2.0	**Skills**		
2.1	Exercises skills dealing with operating system and CPU management strategies.	Lectures	Quizzes Exams Homework Evaluation
3.0	**Values**		
3.1	Fluent in teamwork and cooperation within the computer maintenance team	Lectures	Quizzes Exams Homework Evaluation

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	HomeWorks/StudentParticipation-Attendance/quiz	EveryWeek	15%
2	Project	Fromweek3 to week8	5%
3	Mid-Term	6	20%
	Assignment	7	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	
Essential References Materials	
Electronic Materials	

Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	• Classroom with25 chairs
Technology Resources (AV, data show, Smart Board, software, etc.)	• 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	• Students • Faculty members • Coordinator • Curriculum Committees	• Course exit survey • Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council •
Effectiveness of assessment	• Students • Faculty members • Coordinator • Council • Curriculum Committees	• Course exit survey • Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council • Feedback from Curriculum Committees
Extent of course achievement	• Students • Faculty members • Council • Curriculum Committees	• Course exit survey • Feedback from Faculty members • Feedback from council • Feedback from Curriculum Committees
Extent of course learning outcomes	• Students • Faculty members • Council • Curriculum Committees	• Feedback from Faculty members • Feedback from Course Coordinator • Feedback from council • Feedback from Curriculum Committees
Quality of learning resources	• Students	• Course exit survey

Evaluation Areas/Issues	Evaluators	Evaluation Methods
	• Faculty members • Coordinator • Council • Curriculum Committees	• 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,Qualityoflearning resources, etc.)
Evaluators (Students,Faculty, Program Leaders,PeerReviewer, Others (specify)
Assessment Methods(Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	