## **Operating Systems II**

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

## **COURSE SPECIFICATION**

The goal of this course is to explore the fundamental functions of the operating systems and how do they work. The students will be introduced to how des the system serve as resources manager. Also, they will interact with the operating system using OS API.

1. Teaching Institution	Al-Nahrain University/ College of Science			
2. University Department/Centre	Computer Science department			
3. Course title/code	Operating Systems II			
4. Program(s) to which it contributes	B.Sc. in Computer Science			
5. Modes of Attendance offered	Full Time			
6. Semester/Year	Second Semester/ 2021-2022			
7. Number of hours tuition (total)	30 Theory + 30 Practical			
8. Date of production/revision of this specification				
9. Aims of the Course				
Explore the fundamental functions of the operating systems and how do they work.				

10. Learning Outcomes, Teaching ,Learning and Assessment Method

## A- Knowledge and Understanding A1.Basic knowledge about Operating Systems A2. Focus on the general functionalities of the operating system. B. Subject-specific skills Teaching and Learning Methods Describe, discuss, and practice Assessment methods Exams, Quizes, and Project C. Thinking Skills C1.Asking: Seeking new information C2.Deduce and Conclude. C3. Compare. C4. Discussion Teaching and Learning Methods Describe, discuss, and practice Assessment methods

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. The student will interact with the operating system to understand the underlying functionalities. So, he can develop software that uses the OS efficiently.

D2. Make it easier to student to diagnose OS related problems.

Exams, Quizes, and Project

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1-4	2 theory + 2 Lab.		- CPU Scheduling	Describe, Discuss, and practice	Class Activity
5	=		- Deadlock	=	Class Activity and Quiz
3-4	=		- Processes Structure and Interprocess Communication	=	Class Activity and Quiz
5	=		- Mid 1 Test		
6-9	=		- Memory Management	=	Class Activity and Quiz
10	=		- Mid 2 Test		
11-14	=		- File System and Storage	=	

	12. Infrastructure
Required reading:	Operating Systems Concepts, 10 <sup>th</sup> Edition, Abraham Silberschatz
Special requirements (include for example workshops, periodicals, IT software, websites)	
Community-based facilities (include for example, guest Lectures, internship, field studies)	