Course Description Form

1. Course Name:
Operating Systems I
2. Course Code:
3. Semester / Year:
Semester 1 / 2024-2025
4. Description Preparation Date:
2025-8-25
5. Available Attendance Forms:
Full Time on campus
6. Number of Credit Hours (Total) / Number of Units (Total)
(30 hour lecture + 30 hour lab) / 15
7. Course administrator's name (mention all, if more than one name)
Name: Lect. Ghassan Abdulhakeem Email: Ghassan.alnuaimi@nahrainuniv.edu.iq Lab instructors: Farah Saad, Zainab Haider, Ibtihal Abaas
8. Course Objectives

Course Objectives	• Introduce OS services to the students. • learn the importance of the OS functions to a developer, administrator, and end user. • Learn basic interaction with OS services by programming. • Learn the design and main components of the OS.
9. Teaching and Learning Strategies	
Teaching Strategy	- Weekly face-to-face lectures and practicals, work group assignment, and incorporate hands-on exercises, use visual aids and analogies, and encourage collaboration and discussion.
Learning	- Students engage in class discussion, students presenting their reflection about different topics, focusing on applications, and explore basics and different OSes using VM.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Introduction to OS	Lecture slides	
2	2		Operating system operations	Lecture slides & class discussion.	Quizzes,
3	2		OS components	Lecture slides & class discussion.	Assignments, and quizzes
4	2		Operating system services	Lecture slides & class discussion.	Oral examination
5	2		OS structure and design	Lecture slides & class discussion.	
6	2		System calls and services	Lecture slides & class discussion.	Quizzes
7	2		Mid Exam 1		Written exam
8	2		Process management and concept	Lecture slides & class discussion.	Oral examination
9	2		Process scheduling	Lecture slides & class discussion.	Quizzes
10	2		Interprocess communication	Lecture slides & class discussion.	
11	2		Threads & Concurrency	Lecture slides & class discussion.	Oral examination
12	2		Multithreading models	Lecture slides & class discussion.	
13	2		Mid Exam 2		Written exam
14	2		Implicit threading	Lecture slides & class discussion.	Quizzes
15	2		Threading issues	Lecture slides & class discussion.	Quizzes

11.Course Evaluation

Quizzes: 5%
Oral examination: 5%
Exam: 15%
Practical part: 15%
Final Lab exam 10%
Final Exam: 50%

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Operating Systems Concepts, 10th Edition, Abraham Silberschatz
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	https://codex.cs.yale.edu/avi/os-book/OS1global/slide-dir/index.html