

National Computer Education Accreditation Council
NCEAC

INSTITUTION **National University of Computer and Emerging Sciences, Karachi Campus**

PROGRAM (S) TO BE EVALUATED BS (CS), Fall 2020

A. Course Description

Course Code	CS220		
Course Title	OPERATING SYSTEM		
Credit Hours	3 + 1		
Prerequisites by Course(s) and Topics	ITC and DS		
Assessment Instruments with Weights (homework, quizzes, midterms, final, programming assignments, lab work, etc.)	Midterms	30%	
	Class activity written + Assignments		10%
	Projects	10%	
	Final Exam	50%	
Course Supervisor	Anaum Hamid		
URL (if any)			
Current Catalog Description			
Textbook (or Laboratory Manual for Laboratory Courses)	Operating Systems Concepts by Silberschatz		
Reference Material	Internals and Design Principles, 8th edition, by William Stallings.		
Course Goals	<ul style="list-style-type: none">- To Describe the basic organization of computer system.- To provide a grand tour of major component of operating system- To give an overview of the many types of computing environments.- To explore several open source operating system.		
Topics Covered in the Course, with Number of Lectures on Each Topic (assume 15-week instruction and one-hour lectures)	Week 1: Introduction to Operating system		
	Week 2: Introduction to Operating system		
	Week 3: Operating system structure		
	Week 4: Process Concept(Process scheduling, interprocess communication)		

National Computer Education Accreditation Council
NCEAC

	Week 5:Process Concept			
	Week 6: FIRST MID TERM EXAMINATION			
	Week 7: Process Scheduling			
	Week 8: Multithread Programming Models			
	Week 9: Process Synchronization			
	Week 10: Memory Management Strategies			
	Week 11: SECOND MID TERM EXAM			
	Week 12: Memory Management Strategies			
	Week 13: Virtual Memory			
	Week 14: Virtual Memory			
	Week 15: Deadlock			
	Week 16: Disk Scheduling			
Laboratory Projects/Experiments Done in the Course	Lab manual available separately			
Programming Assignments Done in the Course	Programming Assignments will be given.			
Class Time Spent on (in credit hours)	Theory	Problem Analysis	Solution Design	Social and Ethical Issues
	20%	30%	40%	10%
Oral and Written Communications	Every student is required to submit a project along with its report of not more than 8 pages.			