Faculty of Commerce & Business Administration

Operating Systems

Information :

Course Code :	BIT 312	**Level**	:	Undergraduate	**Course Hours :** 3.00- Hours

Department : Department of Marketing

Area Of Study :

Operating systems are essential part of any computer system. This field is undergoing rapid change, as computers are now prevalent in virtually every application, from games for children through the most sophisticated planning tools for government and multinational firms. This course deals with the concepts of operating systems. It covers different important topics including systems structures, process scheduling, memory management strategies, and other related topics. It also uses examples of many real-world operating systems to illustrate fundamental operating-system concepts.

Description :

Process management, process state, concurrent processing, synchronization, events. Operating system structure, the kernel approach, processor scheduling, task switching, monitors. System management, memory management, process loading, communication with peripherals. File systems. Interactive computation.

Course outcomes :

a.Knowledge and Understanding: :

1 -	Be able to understand the concept of operating systems.
2 -	Be able to understand the concept of systems structures, process scheduling, and memory management strategies.

b.Intellectual Skills: :

1 -	Apply the operating systems concepts and use;
2 -	Evaluate operating systems structures and processes.

c.Professional and Practical Skills: :

1 -	Identify operating systems applications;
2 -	Apply operating systems concepts in different systems' context.

d.General and Transferable Skills: :

1 -	Assess problems.
2 -	Interact efficiently with others.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to operating systems Part1	4	3	1
Introduction to operating systems Part2	4	3	1

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Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
System Structures Part1	4	3	1
System Structures Part2	4	3	1
Process Concept	4	3	1
1st Midterm Exam	4	3	1
Multithreading Programming	4	3	1
Process Scheduling Part1	4	3	1
Process Scheduling Part2	4	3	1
Memory Management Strategies Part1	4	3	1
2nd Midterm exam	4	3	1
Memory Management Strategies Part2	4	3	1
File Systems Part1	4	3	1
File Systems Part2	4	3	1
Project Presentation and revision	4	3	1

Teaching And Learning Methodologies :

Data show and computer in lectures.
Demonstration videos.
Group discussion
Self-learning
Practical.

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
1st Mid-Term Exam	20.00	6	
2nd Mid-Term Exam	20.00	11	
Final Exam	40.00	16	
Semester Work	20.00	13	

Course Notes :

Handouts.

Web Sites :

- http://www.tutorialspoint.com/operating_system/os_overview.htm.
- http://en.wikipedia.org/wiki/Operating_system

http://www.fue.edu.eg