

Kingdom of Saudi Arabia
The National Commission for Academic Accreditation & Assessment

227CSS-3
Operating Systems

Course Specification
Second Semester 2016-2017

B. Objectives

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C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
1. Overview of Operating System	1	
2. Operating System Structure	1	
3. Introduction to UNIX commands and vi editor	1	
4. Process Concept	1	
5. Multithreaded Programming	1	
6. Multithreaded Programming	1	
7. Process Scheduling	1	
8. Process Scheduling	1	
9. Process Synchronization	1	
10. Deadlocks	1	
11. Deadlocks	1	
12. Memory Management Strategies	1	
13. Virtual Memory Management	1	
14. Implementing File Systems	1	

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other	Total
Contact Hours						0
Credits						0

3. Additional private study/learning hours expected for students per week.

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Method
1.0	Knowledge		
1.1	Not applicable to this course		
2.0	Cognitive		
2.1	Not applicable to this course		
3.0	Interpersonal		
3.1	Not applicable to this course		
4.0	Communication		
4.1	Not applicable to this course		
5.0	Psychomotor		
5.1	Not applicable to this course		

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task	Week Due	Proportion of Total Assessment
1.	Quiz 1		2 %
2.	Quiz 2		2 %
3.	Quiz 3		2 %
4.	Assignment 1		2 %
5.	Assignment 2		2 %
6.	Mid Term Exam 1		15 %
7.	Mid Term Exam 2		15 %
8.	Lab Performance		10 %
9.	Final Lab Exam		10 %
10.	Final Theory Exam		40 %

D. Student Academic Counseling and Support

1.

E. Learning Resources

1. List Required Textbooks - A. Silbershultz, Galvin and Gagne, Operating System Concepts, 9th Edition, John Wiley & Sons.
2. List Essential References Materials (Journals, Reports, etc.) - Andrew S. Tanenbaum, Modern Operating Systems, 3rd Edition, Prentice Hall - P.C.P. Bhatt, Operating Systems, 2nd Edition, Prentice Hall India - William Stallings, Operating Systems, 4th Edition, Prentice Hall
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc) -

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.) -
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software. -

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) -
2. Computing resources (AV, data show, Smart Board, software, etc.) -
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) -

G. Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching		
Methods	Ways	Plan of Action
2. Other Strategies for Evaluation of Teaching by the Program/Department Instructor		
3. Processes for Improvement of Teaching		
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)		
5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.		

Teaching Staff : Mr. Muhammad Akram

Signature : _____

Date of Report Completed : 15-Jun-2017

Received by : _____

Dean/Department Head

Signature : _____

Date : _____

