UNIVERSITI TEKNOLOGI MARA
CSC204: PRACTICAL APPROACH OF OPERATING SYSTEMS

Course Name (English)	PRACTICAL APPROACH OF OPERATING SYSTEMS APPROVED
Course Code	CSC204

MQF Credit	3

Course Description	The operating system is an essential part of a computer system. Similarly that the need to understand and appreciate the operating system is also indispensable to the computer science students. Operating systems should be studied for the reason of their existence: what they do, how they did it, and how they are designed and constructed.

Transferable Skills	1. Demonstrate professional skills , knowledge and competencies. 2. Demonstrate ability to investigate problems and provide effective solutions.

Teaching Methodologies	Lectures, Lab Work

CLO		
	CLO1	Determine the core functions of Operating System with its performance issues.
	CLO2	Display the use of system software and tools available in various operating systems (Linux, Windows, DOS).
	CLO3	Report in writing the issues of protection and security of an Operating Systems.

Pre-Requisite Courses	No course recommendations

Topics
1. Basic Operating System Theory   1.1) Understanding of Operating Systems   1.2) Operating Systems Functions and Concepts   1.3) Operating Systems Booting Concepts
2. Operating System - User View   2.1) Understanding User Interface   2.2) File system   2.3) Device Driver
3. Operating System - System View   3.1) Process Management   3.2) Memory Management   3.3) Input Output Management
4. Operating System Protection and Security   4.1) User Authentication   4.2) Basic Resource Protection

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Lab assignment 1 and report	5%	CLO3
	Assignment	Lab assignment 2 and report	5%	CLO3
	Lab Exercise	Lab 1	5%	CLO2
	Lab Exercise	Lab 2	5%	CLO2
	Quiz	Quiz 1	5%	CLO1
	Quiz	Quiz 2	5%	CLO1
	Test	Test 1	10%	CLO1
	Test	Test 2	10%	CLO1

Reading List	Recommended Text	• William Stallings 2018, *Operating Systems: Internals and Design Principles*, 9 Ed., 16, Pearson Education; 2019 edition [ISBN: 978935286671]
		• Rajiv Chopra 2016, *Operating Systems - A Practical Approach*, 4 Ed., 12, S Chand Publishing [ISBN: 978938567635]
		• B. Mohamed Ibrahim 2016, *Linux: A Practical Approach*, 1 Ed., 10, Laxmi Publications [ISBN: 978817008723]
		• Abraham Silberschatz, Greg Gagne, Peter B. Galvin 2018, *Operating System Concepts*, 10 Ed., 21, Wiley [ISBN: 9781119320]
	Reference Book Resources	• Andrew S. Tanenbaum 2016, *Modern Operating Systems*, 4 Ed., 1136, Pearson [ISBN: 9789332575776]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	