

Course Name : Operating Systems							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 224	B	Spring	2.00	0.00	2.00	3.00	6.00
Lecturer Armand Agolli, Msc							
Assistant Ksandra Xhukellari, Msc							
Course language Albanian							
Course level Bachelor							
Description		The Operating System class has in its basis the performance control of the computer equipment and it's Operating System resources This class is proposed by having an innovative set of tools and strategies for cultivating basic knowledge and practical skills of the students. The topics of this class offer the necessary knowledge to browse between the computer equipment and their Operating Systems, they solidify the principles of the ways the equipment is build, introduce the students to the information security and data management of sensitive information. As a result, the class leads to the strengthen the relationship between the previous completed classes and the growth of analysis level and design capacity of the computer systems.					
Objectives		The objectives of this subject are: Learn how to install Windows 10/11 Client operating systems To learn configuration, authorization and authentication To learn the configuration of parameters after installation and customization To learn network configuration on Windows clients To learn disk configuration in Windows clients To learn the configuration of data access and its use To learn application management and update To learn the configuration of protection against computer attacks To learn the support of the Windows client environment To learn how to solve system and application problems To learn how to solve the problems of devices and drivers					
Core Concepts		The essential concepts of this subject are: 1. Installation of Windows 10/11 Client operating systems 2. Configuration, authorization and authentication 3. Configuration of parameters after installation and customization 4. Network configuration on Windows clients 5. Disk configuration in Windows clients 5. Configuration of data access and their use 6. Management of applications and updates 7. Configuration of protection against computer attacks 8. Windows client environment support 9. Solving system and application problems 10. Troubleshooting of devices and drivers					
Course Outline							
Week	Topic						
1	Installing and Upgrading Client Systems Book: Microsoft Official Academic Course - Microsoft Technology Associate - Exam 98-349 - Windows Operating System Fundamentals Page: 01 - 23						
2	Understanding Operating System Configurations Book: Microsoft Official Academic Course - Microsoft Technology Associate - Exam 98-349 - Windows Operating System Fundamentals Page: 24 - 67						
3	Understanding Native Applications and Tools Book: Microsoft Official Academic Course - Microsoft Technology Associate - Exam 98-349 - Windows Operating System Fundamentals Page: 69 - 97						
4	Understanding Mobility, Remote Management, and Remote Assistance Book: Microsoft Official Academic Course - Microsoft Technology Associate - Exam 98-349 - Windows Operating System Fundamentals Page: 98 - 121						

5	Managing Applications & Services Book: Microsoft Official Academic Course – Microsoft Technology Associate – Exam 98-349 – Windows Operating System Fundamentals Page: 122 - 144
6	Managing Disks Book: Microsoft Official Academic Course – Microsoft Technology Associate – Exam 98-349 – Windows Operating System Fundamentals Page: 144 - 162
7	Managing Devices Book: Microsoft Official Academic Course – Microsoft Technology Associate – Exam 98-349 – Windows Operating System Fundamentals Page: 163 - 186
8	Mid Term Exam
9	Understanding File and Printer Sharing Book: Microsoft Official Academic Course – Microsoft Technology Associate – Exam 98-349 – Windows Operating System Fundamentals Page: 187 - 209
10	Maintaining, Updating, and Protecting Windows 10. Book: Microsoft Official Academic Course – Microsoft Technology Associate – Exam 98-349 – Windows Operating System Fundamentals Page: 211 - 241
11	Understanding Backup and Recovery Methods Book: Microsoft Official Academic Course – Microsoft Technology Associate – Exam 98-349 – Windows Operating System Fundamentals Page: 242 - 259
12	Working With Other Operating Systems Book: CompTIA A+: A Comprehensive Approach (Exams 220-901 and 220-902) Page: 360 - 406
13	Security Threats, Vulnerabilities and Controls Book: CompTIA A+: A Comprehensive Approach (Exams 220-901 and 220-902) Page: 575 - 605
14	Troubleshooting System-Wide Issues Book: CompTIA A+: A Comprehensive Approach (Exams 220-901 and 220-902) Page: 641 - 682
15	Summary, Review, and Course Project Presentation
16	Final Exam
Prerequisites	The student must attend the course at a minimum rate of 75%.
Literature	<ul style="list-style-type: none"> • Microsoft Official Academic Course - Windows Client - Second Edition - EXAM MD-100
References	<ul style="list-style-type: none"> • Bettany A., Warren A. Exam Ref MD-100 Windows 10 2ed 2022
Course Outcome	
1	Windows Operating Systems Management – The students will be able to install and make basic configurations of Windows Operating Systems.
2	Other Operating Systems Management (Linux, OSX) - The students will be able to install and make basic configurations of the Linux and OSX Operating System.
3	Applications and Devices Management – The students will be able to install, configure, manage, and uninstall devices and applications.
4	Data and Information Management – The students will be able to backup, restore, encrypt, and decrypt data on computer devices.
5	Operation Systems Security Management – The students will be able to guarantee the security of Operating Systems through the management of Firewall, Antivirus and security policies of the Operating System.

Course Evaluation			
In-term Studies	Quantity	Percentage	
Midterms	1	20	
Quizzes	5	10	
Projects	1	20	
Term Projects	0	0	
Laboratory	0	0	
Class Participation	0	0	
Total in-term evaluation percent		50	
Final exam percent		50	
Total		100	
ECTS Workload (Based on Student Workload)			
Activities	Quantity	Duration (hours)	Total (hours)
Course duration (Including the exam week: 16x Total hours of the course)	16	4	64
Study hours outside the classroom (Preparation, Practice, etc.)	14	4	56
Duties	1	20	20
Midterms	1	5	5
Final Exam	1	5	5
Other	0	0	0
Total Work Load			150
Total Work Load / 25 (hours)			6.00
ECTS			6.00