

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
<b>Lecturer</b> Armand Agolli, Msc							
<b>Assistant</b>							
<b>Course language</b> Albanian							
<b>Course level</b> Bachelor							
<b>Description</b>		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.					
<b>Objectives</b>		1. To be able to install and configure basic function of client Operating Systems (Windows, Linux, and OSX). 2. To be able to install and configure devices and applications in the Windows, Linux, and OSX environment. 3. To be able to manage data and sensitive information of the computer equipment under administration 4. To be able to manage the security of Windows, Linux, and OSX Operating Systems					
<b>Core Concepts</b>		1. Windows Operating System Management 2. Other Operating Systems Management (Linux, OSX) 3. Application and Devices Management 4. Information and Data Management 5. Operating System Security Management					
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						

<b>9</b>	Understanding File and Printer Sharing Book: Microsoft Official Academic Course - Microsoft Technology Associate - Exam 98-349 - Windows Operating System Fundamentals Page: 187 - 209
<b>10</b>	Maintaining, Updating, and Protecting Windows 10. Book: Microsoft Official Academic Course - Microsoft Technology Associate - Exam 98-349 - Windows Operating System Fundamentals Page: 211 - 241
<b>11</b>	Understanding Backup and Recovery Methods Book: Microsoft Official Academic Course - Microsoft Technology Associate - Exam 98-349 - Windows Operating System Fundamentals Page: 242 - 259
<b>12</b>	Working With Other Operating Systems Book: CompTIA A+: A Comprehensive Approach (Exams 220-901 and 220-902) Page: 360 - 406
<b>13</b>	Security Threats, Vulnerabilities and Controls Book: CompTIA A+: A Comprehensive Approach (Exams 220-901 and 220-902) Page: 575 - 605
<b>14</b>	Troubleshooting System-Wide Issues Book: CompTIA A+: A Comprehensive Approach (Exams 220-901 and 220-902) Page: 641 - 682
<b>15</b>	Summary, Review, and Course Project Presentation
<b>16</b>	Final Exam
<b>Prerequisites</b>	The student must attend the course at a minimum rate of 75%.
<b>Literature</b>	<ul style="list-style-type: none"> <li>• Microsoft Official Academic Course - Windows Operating System Fundamentals - Second Edition - MTA EXAM 98-349 - Wiley Publishing</li> </ul>
<b>References</b>	<ul style="list-style-type: none"> <li>• CompTIA A+: A Comprehensive Approach - Exams 220-901 and 220-902 - Pamela J.Taylor, Gail Sandler</li> </ul>
<b>Course Outcome</b>	
<b>1</b>	Windows Operating Systems Management - The students will be able to install and make basic configuration of the Windows Operating System
<b>2</b>	Other Operating Systems Management (Linux, OSX) - The students will be able to install and make basic configuration of the Linux and OSX Operating Systems
<b>3</b>	Application and Device Management - The students will be able to install, configure, manage, and uninstall computer equipment and applications
<b>4</b>	Information and Data Management - The students will be able to backup, restore and encrypt the data of computer equipment
<b>5</b>	Operating Systems Security Management - The students will be able to guarantee the security of the operating systems by managing Firewall, Antivirus and operating systems security policies

<b>Course Evaluation</b>			
<b>In-term Studies</b>	<b>Quantity</b>	<b>Percentage</b>	
Midterms	1	20	
Quizzes	0	0	
Projects	1	10	
Term Projects	0	0	
Laboratory	0	0	
Class Participation	0	0	
<b>Total in-term evaluation percent</b>		<b>30</b>	
<b>Final exam percent</b>		<b>70</b>	
<b>Total</b>		<b>100</b>	
<b>ECTS Workload (Based on Student Workload)</b>			
<b>Activities</b>	<b>Quantity</b>	<b>Duration (hours)</b>	<b>Total (hours)</b>
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	10	10
Midterms	1	10	10
Final Exam	1	10	10
Other	0	0	0
<b>Total Work Load</b>			<b>150</b>
<b>Total Work Load / 25 (hours)</b>			<b>6.00</b>
<b>ECTS</b>			<b>6.00</b>