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	Olsi Shehu, MSc
Assistant	Armand Agolli, Msc
Course language	Albanian
Course level	Bachelor
Description	The Operating Systems course is based on monitoring the performance of computer devices and managing the resources of a computer system. This course is designed using a set of innovative tools and strategies, both theoretical and practical, to develop students' foundational knowledge and practical skills. The topics covered in this course and their development provide the necessary knowledge to navigate between hardware devices and operating systems, reinforce the principles of computer hardware design, introduce students to information security, and guide them in managing data and sensitive information. As a result, the course aims to strengthen the connections between related subjects and enhance students' analytical abilities and design capacities in the field of computer systems.
Objectives	Objectives (The objectives of the course represent the goals it aims to achieve upon completion) 1. To be able to install and configure the basic functions of Windows, Linux, and OSX operating systems. 2. To be able to install and configure devices and applications in Windows, Linux, and OSX environments. 3. To be able to manage data and sensitive information of administrated computer devices. 4. To be able to manage the security of Windows, Linux, and OSX operating systems.
Core Concepts	1. Windows Operating Systems Management 2. Management of Other Operating Systems (Linux, OSX) 3. Device and Application Management 4. Data and Information 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	Midterm Exam
9	Understanding File and Printer Sharing Book: Microsoft Official Academic Course – Microsoft Technology Associate – Exam 98-349 – Windows Operating System Fundamentals Pagee: 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	• Microsoft Officeial Accademic Course – Microsoft Technology Associate – Exam 98-349 – Windows Operating System Fundamentals – Willey Publications – ISBM 9781119060390 - 2017 • CompTIA A+: A Comprehensive Approach (Exams 220-901 and 220-902) – Author Pameja J.Taylor, Gail Sandler - 2016
References	• Windows Operating System Fundamentals – Crystal Panek ISBN: 978119650515 • Windows Operating System Fundamentals – Crystal Panek ISBN: 978119650515

Course Outcome

1	Windows Operating Systems Management – Students will be able to install and perform basic configurations of Windows operating systems.
2	Management of Other Operating Systems (Linux, OSX) – Students will be able to install and perform basic configurations of Linux and OSX operating systems.
3	Device and Application Management – Students will be able to install, configure, manage, and uninstall computer devices and software applications.
4	Data and Information Management – Students will be able to perform backup, restore, and encryption of data on computer devices.
5	Operating System Security Management – Students will be able to ensure the security of operating systems through the management of Firewall software, Antivirus programs, and operating system security policies.

Course Evaluation

In-term Studies	Quantity	Percentage
Midterms	1	20
Quizzes	0	0
Projects	1	20
Term Projects	0	0
Laboratory	0	0
Class Participation	0	0
Total in-term evaluation percent		**40**
Final exam percent		**60**
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	15	15
Midterms	1	5	5
Final Exam	1	6	6
Other	1	4	4
Total Work Load			**150**
Total Work Load / 25 (hours)			**6.00**
ECTS			**6.00**