

Specification for the book of courses

Study program		Computing and Informatics		
Module		Computer Systems Security		
Type and level of studies		Master studies		
The name of the course		System Administration		
Lecturer (for lectures)		Tošić B. Milorad		
Lecturer/associate (for exercises)		Tošić B. Milorad		
Lecturer/associate (for OFE)				
Number of ECTS	4	Course status (obligatory/elective)	Elective	
Prerequisites				
Course objectives	Introduction to fundamental procedures of system administration in Linux-based operating systems.			
Course outcomes	Upon completion of the course the student should be able to administer Linux-based operating systems to the level needed for operation of medium-size development teams.			
Course outline				
Theoretical teaching	Linux operating system: Fundamentals of Linux operating system from system administration perspective. Overview of the available open-source Linux distributions. Commands and languages for writing script programmes. User management. File system management. Operating system vulnerabilities. Server management - configuration documents. Activity tracking - logs. Basics of Technical Support: Technical Support basic principles, Workflows - Level 1, Level 2, Level 3 and management level. Remote location support. Virtualized system administration. Main types of virtualization and available technologies. Container-based system. Virtual machine-based systems. Virtualized network management.			
Practical teaching (exercises, OFE, study and research)				
Textbooks/references				
1	Nemeth E. UNIX and Linux System Administration Handbook, 4/e. Pearson Education India; 2011.			
2	T. Adelstein, F. Timme, and B. Lubanovic. Linux System Administration. O'Reilly Media, Inc., 2007			
3				
4				
5				
Number of classes of active education per week during semester/trimester/year				
Lectures	Exercises	OFE	Study and research work	Other classes
2	1	0		
Teaching methods	Lectures and auditory exercises supported by e-learning platform. Laboratory exercises. Practical exercises involving remote virtual machine access and individual computers.			
Grade (maximum number of points 100)				
Pre-exam duties	Points	Final exam	Points	
Activity during lectures	30	Written exam		
Exercises	30	Oral exam	40	
Colloquia				
Projects				