

Study program: Modern computer technologies			
Course title: Network Services			
Professor/assistant: Dušan M. Stefanović			
Type of course: elective			
ECTS credits: 7			
Pre-requisites: none			
Aims of the course: Students should be able to recognize different types, characteristics and functions of network services and successfully install, configure and administer them accordingly.			
Learning outcomes: Define different types of network services. Setting, explaining, and using various commands in order to install and set network services. Recognize and explain the usage of different protocols. Explain and deploy services and applications for network operating systems. Setting and explaining different tools for tshoot.			
Syllabus			
<i>Theoretical part</i> Network operating systems and protocols. Basic network operating system commands. Overview of the TCP / IP protocol set. TCP / IP services and applications. Troubleshooting and troubleshooting tools in TCP / IP networks. Network services (DHCP, DNS, Mail, Web, Print, NAT, NTP, Syslog, SSH and FTP). Multimedia services (voice and image transmission via TCP / IP protocol).			
<i>Practical part</i> Setting basic TCP / IP protocol parameters. TCP / IP basic network services installation and configuration in Packet Tracer and GNS3 software. Network infrastructure configuration in complex network topology.			
Literature			
<ol style="list-style-type: none"> 1. INTERNETWORKING WITH TCP/IP Volume One (6th Edition) , Douglas E.Comer, CET, 2000. 2. NETWORKING, MSCE certification book, CET, 2015. 3. DEPLOYING IPV6 NETWORKS, Ciprian Popoviciu, Eric Levz-Abegnoli, Patric Grossetete, Computer library, 2007. 			
Number of active classes			Other forms of teaching:
Lectures: 30	Practical classes: 15	Research work: 15	
Teaching methods Combination of interactive approach with practical problem solving.			
Grading system (maximum 100 points), grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.			
Pre-exam obligations	points	Final exam	points
activity during theoretical lectures	20	written exam	30
practical training	10	oral exam	
colloquium(s)/seminar papers	40		
Sum	70	Sum	30