



UNIVERSITY “UKSHIN HOTI” PRIZREN
FACULTY OF COMPUTER SCIENCE

PROGRAM: Information Technology and Telecommunication - Turkish

Curriculum - – SYLLABUS							
<i>Level of studies</i>	Bachelor	<i>Program</i>	TIT-TUR	<i>Academic year</i>	2018/19		
<i>SUBJECT</i>	TCP/IP						
<i>Year</i>	2	<i>Status Of the subject</i>	Obligatory	<i>Code</i>		<i>ECTS credits</i>	6
<i>Semester</i>	4						
<i>Teaching weeks</i>	15		<i>Hours teaching</i>	45		<i>Lectures</i>	<i>Exercises</i>
						2	2
<i>Teaching Methodology</i>	<ul style="list-style-type: none"> Power point of course subjects. Exercises and homework exercises related to the course subjects. Course repetition, group work, discussion and analysis. 						
<i>Consultation</i>	Students with a grade of 40 or above can attend the interview.						
<i>The teacher</i>	PhD.Cand. Berkant Başa		<i>E-mail:</i>	basaberkant@gmail.com			
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Study goal and table of content	Benefits of student
<p>The aim of this course is to give the students basic information about Network concepts. In this course, network parameters, network devices, the necessary elements for the LAN installation, TCP / IP and internet to have information about and also in the course of the simulation program with the help of the project (network) will be given general information about all stages.</p> <p>The student is expected to have a general knowledge about network development.</p>	<p>Students who successfully complete this course:</p> <ul style="list-style-type: none"> Explain the concepts of TCP / IP, Network, LAN Installation, Network management. Define the OSI Application Model and the tasks assigned to each layer. Describe the operation of network devices, computer or similar digital systems. Router configuration and Riverbed with simulation program be ready for case studies.

Methodology for the implementation of educational topics:			
Lecture, slide show presentation, group work, discussion on the topics of the question and the student to analyze the topics, ideas to say, to do research about the subjects we are going to do in the course will be asked about the subjects we are going to do in the application course, problem solving and project preparation.			
Conditions for realization of educational topics:			
The course covers the theoretical issues in Computer Networks. For this purpose, the Internet uses the Hierarchy of Protocols and it goes down from Top to Down and builds on how the applications familiar to students work.			
Ways of assessing of the student (in %) :	Evaluation in%	Final grade	
HomeWork / Practice lesson	% 10	51-60%-	6
Midterm	%40	61-70	7
Final exam	%50	71-80	8
Total	100.00 %	81-90	9
		91-100	10

Obligations of student:			
Lectures		Exercises	
The student is obliged to follow the courses and practice courses. They have to come prepared for the lesson based on the resources determined by the professor. During the course, students must actively contribute to improve the quality of the course. The rules and ethical principles required by the university and higher education should be taken into consideration.		For the student application course, the subjects of the lecture are required to make exercises on the subjects and prepare homework / projects within the given subject.	
Activities		Hour/ weeks	Days/Weeks
Lectures		2	15 weeks
Laboratory exercises		2	15 weeks
Contacts with teachers / consultations		0,5	15 weeks
Practical work		0,5	15 weeks
Projects, presentations, etc.		1	15 weeks
Own study time		1	15 weeks
Preparation for final exam		1	15 weeks
Time spent in the assessment (tests, final exam, etc.)		2	15 weeks
Notice: 1 ECTS credits= 25 hour commitment, e.g. if the subject has 6 ECTS credits student must have 150 hours during the semester commitment.			Total load: 150
Week	Lectures	Hour	Exercises
	Topic		Topic
1-2	<ul style="list-style-type: none"> • Network Concepts • Complete network parameters (LAN, Campus, WAN, Remote Connection) • OSI Application Model 	4	<ul style="list-style-type: none"> • Information and usage areas of Riverbed Modeler Academic Edition 17.5. • Installation of Riverbed Modeler Academic Edition 17.5
3	<ul style="list-style-type: none"> • Network Devices (Network card, HUB, Switch, Router, Gateway, Firewall, Modem device, Acces server, Transciever, Internet access sharing) 	2	<ul style="list-style-type: none"> • Riverbed Modeler Academic Edition to recognize the application of network devices.
4-5	<ul style="list-style-type: none"> • Intranet / Extranet- (Internal / External Networks), VPN, vLAN, Physical connection between systems, Network Management. • Network operating systems, Protocol and standards, Protocol sets, Ethernet & Token Ring Families. 	4	<ul style="list-style-type: none"> • Application with internal / external networks. • Private virtual network and Virtual network application. Network management application.
6-7	<ul style="list-style-type: none"> • ISDN, ADSL, LMDS. • Serial transmission, Dial-Up analog connection, Switching methods in data transmission, packet switching, circuit switching. • QoS Service quality, Voice, Data, Image transmission, Voice over IP. 	4	<ul style="list-style-type: none"> • Riverbed Modeler Academic Edition with ISDN, ADSL, Dial-Up application • Package switching application • Voice, Data, Image transmission, Voice transmission over IP.
8	Midterm	2	<ul style="list-style-type: none"> • Solution of Exam Questions

9-10	<ul style="list-style-type: none"> Requirements for setting up LAN TCP / IP and Internet 	4	<ul style="list-style-type: none"> Simple LAN installation Application with Riverbed Sender and receiver port application 	4
11-12	<ul style="list-style-type: none"> IP addresses and Subnets IP Routing IPv4 	4	<ul style="list-style-type: none"> IP addresses: symbolic, DNS applied, Class IP addressing, subnetting and subnet mask implementation 	4
13-14	<ul style="list-style-type: none"> Router Overview, Router configuration. IPv6. UNIX Architecture. 	4	<ul style="list-style-type: none"> Router installation and router configuration applied 	4
15	Final Exam	2	<ul style="list-style-type: none"> Solution of Exam Questions 	2

LITERATURE:	
<p>1. Bulut Bilişim Ders Notları-“Numan ÇELEBİ-2014”, Sakarya Üniversitesi bilgisayar Mühendisliği Bölümü. 2. https://www.researchgate.net/publication/307545682 Bulut Bilisim Teknolojisi ve Bulut CBS Uygulamalari 3. Bulut Bilişim ve Eğitim Alanında Örnek Bir Uygulama, Onur Seveli, Yüksek Lisans Tezi, Bilgisayar Mühendisliği Anabilim Dalı, Isparta – 2011. 4. Cloud Computing and Virtualization, Tarkan Eyerci, Cybersoft. 5. Bulut Bilişim Güvenliği 85, Evrim Furuncu, Gebze Yüksek Teknolojisi Enstitüsü</p>	
NOTICE:	
<ul style="list-style-type: none"> ✓ In general, the course will be run with Power Point and other resources. ✓ In addition, the Professor will provide additional resources other than the main sources (scientific studies, reports, national and international published articles). 	
Notice for the student:	
<ul style="list-style-type: none"> ✓ It is necessary to enter the course on time and prepared. ✓ other than this, students cannot enter the course. ✓ 80% attendance is required during the semester. ✓ In the course, discussion, ask questions, feedback, subject and presentation, taking an active role in the applications. ✓ Voice recorder, telephone, etc. The use of such devices is prohibited. 	