

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Computer Networks				
Head of course	Associate Professor, PhD Alen Jakupović				
Study programme	Professional undergraduate study Information Science				
Status of a course	Obligatory				
Year of study	2	Semester	IV	ECTS credits	5
Teaching plan (L + E + S+ Pr)	2+2+0+0				
Goals of a course					
Acquire competencies for establishing wired and wireless computer networks, DHCP, DNS, WEB, FTP and E-mail server network services, and remote work systems.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 3: Establish a computer network and network services. Outcome 12: Apply engineering methods and principles in information science. Outcome 14: Participate in teamwork.					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> 1. Establish a wired and wireless local area network with static and dynamic IP addresses connected to the Internet 2. Establish DHCP and DNS server network services 3. Establish WEB, FTP and E-mail server network services 4. Establish a system for remote work 					
Content of a course					
Introduction to computer networks. Role of computer networks. Development of computer communications. Computer network architecture (ISO/OSI) reference models. Functional characteristics of computer network facilities. Data protecting during in transfer. Computer communications security. Data exchange protocols. Computer network architecture and protocols. Definition of standards and protocols. Communication system model for data transfer. System of Internet, its organization and standards, data transfer. Private networks-intranet. Internet access protection. Development and future of computer networks. Network maintenance, network news. User networks. Principles of users' activity.					
Teaching modes	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
Comments					
Students' obligations					
Grading, evaluation and monitoring of students' work continuously during lectures and exams					
Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.					

Continuous check-up:

Outcomes	Written exam	Practical tasks	Threshold	Max
Outcome 1	10 %	15 %	12,5 %	25 %
Outcome 2	8 %	22 %	15 %	30 %
Outcome 3	8 %	22 %	15 %	30 %
Outcome 4	4 %	11 %	7,5 %	15 %
Percentage of ECTS	1,5	3,5	-	-
Total	30 %	70 %	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Exam term:

Outcomes	Written exam	Oral exam	Max
Outcome 1	10 %	15 %	25 %
Outcome 2	8 %	22 %	30 %
Outcome 3	8 %	22 %	30 %
Outcome 4	4 %	11 %	15 %
Percentage of ECTS	1,5	3,5	-
Total	30 %	70 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

Obligatory literature

1. Authorized Lectures

Additional literature

1. Andrew Tanenbaum: Računarske mreže (4. izdanje), Mikro knjiga, Zagreb, 2005
2. Douglas E. Comer: Internetworking with TCP/IP, Vol 1 (5th Edition), Prentice Hall, 2005
3. Laura A. Chappell, Ed Tittel: Guide to TCP/IP, Course Technology, 2002

