

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Communication Technique				
Head of course	Damir Malnar, Lecturer				
Study programme	Professional undergraduate study Telematics				
Status of a course	Obligatory				
Year of study	1.	Semester	II	ECTS credits	6
Teaching plan (L + E + S+ Pr)	2+2+0+0				
Goals of a course					
Adopt basic concepts related to modern communication networks. Gain basic knowledge of network management and maintenance, and the basics of structural cabling and configuration of advanced network devices.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 7: Describe the development and implementation of communications systems, switching systems, and local and broadband networks. Outcome 8: Design and implement communications and computer networks, as well as network services. Outcome 11: Design and develop solutions for components, circuits and software for application in signal processing and telecommunications, with the preparation of supporting project documentation.					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> 1. Explain network and network hardware functions within OSI and TCP/IP models 2. Explain and apply the standards of modern communications networks 3. Explain routing technology and techniques in IP networks 4. Explain and apply common transport, network, and application layer protocols 5. Describe and configure advanced network devices and services, and explain access network technologies 					
Content of a course					
Basics of digital communication; available infrastructures (LAN; WAN, Wireless and other); Models of communication; Open systems communication; ISO / OSI reference models; Seven layers; Layers 1-3 exemplary (LAN, ISDN, ATM); Transfer media; Economy in stratification; Network application. Client- Server Interaction; electronic mail; Data transfer and data retrieval; Network management, Network security; Systems of telecommunication, telephone, fax.					
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 test	Laboratory exercises	Threshold	Max
Outcome 1	15 %	5 %	10 %	20%
Outcome 2	15 %	5 %	10 %	20%
Outcome 3	15 %	5 %	10 %	20%
Outcome 4	15 %	5 %	10 %	20%
Outcome 5	15 %	5 %	10 %	20%
Percentage of ECTS	4	2		
Total				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	Threshold	Max
Outcome 1	15 %	5 %	10 %	20%
Outcome 2	15 %	5 %	10 %	20%
Outcome 3	15 %	5 %	10 %	20%
Outcome 4	15 %	5 %	10 %	20%
Outcome 5	15 %	5 %	10 %	20%
Percentage of ECTS	4	2		
Total	75	25		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. Lecture notes
2. Meyers, M.: CompTIA+ Guide to Managing and Troubleshooting Networks, 5th edition, McGraw-Hill Education, 2018

Additional literature

1. Kurose J.: Computer Networking: A Top-Down Approach, 7th Edition, Pearson, 2016

