Assessment and subject description

Óbuda University *Kandó Kálmán Faculty of Electrical Engineering*			*Institute of Communication Engineering*	
Subject name and code: *Infocommunication networks II. KHTIH21ANC* ***Credits:*** *8* *Full-time, Spring Semester*				
Course: *normal*				
Responsible: *Dr. Beinschróth József*	*docent*	***Teaching staff:***	*Dr. Beinschróth József*	
Prerequisites:	*Infocommunication networks I. KHTIH11ANC*			
Contact hours per week: *4*	***Lecture:*** *4*	***Class discussion****: 0*	***Lab hours:****3*	***Tutorial:***
Assessment and evaluation:	*Signature and written examination*			
Subject description				
Aims:	*Understanding basics of network operation*			
Topics to be covered:	*Example for network technology based on network layer.* *Transport layer and its protocols.* *Transport protocols of Internet: TCP és UDP. Address translation* *Traditional applications of application layer: telnet, Secure Shell, File Transfer Protocol, email.* *Service application of alpplication layer: DNS, WINS* *Wold Wide Web and intranet* *Consultation/Intermediate exam* *Cryptography* *Internet Protocol Security - IPSec, Virtual Private Network - VPN), border protection.* *Ensuring quality parameters in network layer: Intserv, Diffserv, MPLS.* *Multimedia in network layer. H323, SIP.* *Formal description of protocols* *Network model:client-server and P2P models* *Cloud computing, IoT – Internet of Things*			

Topics	***week***	***Duration***
Example for network technology based on network layer. *Transport layer and its protocols.*	*1.*	*4*
Transport protocols of Internet: TCP és UDP. Address transalation	*2.*	*4*
Traditional applications of application layer: telnet, Secure Shell, File Transfer Protocol, email.	*3.*	*4*
Service application of application layer: DNS, WINS, Wold Wide Web and intranet	*4.*	*4*
Break	*5.*	*-*
Consultation/Intermediate exam	*6.*	*4*
Cryptography	*7.*	*4*
Internet Protocol Security - IPSec, Virtual Private Network - VPN), border protection.	*8.*	*4*
Ensuring quality parameters in network layer: Intserv, Diffserv, MPLS.	*9.*	*4*
Break	*10.*	*4*
Multimedia in network layer. H323, SIP. *Formal description of protocols*	*11.*	*-*
Network model:client-server and P2P models *Cloud computing, IoT – Internet of Things*	*12.*	*4*
Consultation/Intermediate exam	*13.*	*4*
Consultation/Supplementary exam	*14.*	*4*

Assessment and evaluation:

Requirements of the signature:

1. *Taking part in the lecures and laboratory practiceses*
2. *Passing both of the intermediate examinations (*
3. *Keeping 15 minutes student presentation*

Type of exam:

Written examinaton covers whole topic of the semester

Evaluation of exam:

%	*grade*
85 - 100	*(5)*
70 - 84	*(4)*
55 - 69	*(3)*
40 - 54	*(2)*
0 - 39	*(1)*

Timetable of qualifications are the next:

	Date	***Longness***	***Minimum result***	***Topics***
1. IE	*6. week*	*90 minutes*	*40%*	*1-5 lecture*
2. IE	*13. week*	*90 minutes*	*40%*	*7-12 lecture*
Supplmentation	*14. week*	*90(180) minutes*	*40%*	*topics should be supplemeted*

Other: Using Electornic or printed material isn't allowed during examinations

Suggested materials

Compulsary:

- *Presentation used in lectured, can be downloaded from Moodle system*

Suggested:

- *Andrew S. Tanenbaum: Computer nerworks*
- *Dr. Kovács Oszkár: Távközlési Informatika, BMF KVK 2028 (Hungarian)*
- *Dr. Kovács Oszkár: Multimédia kommunikáció IP környezetben, Logonex, 2012 (Hungarian)*
- *Kónya László: Számítógép-hálózatok, LSI Oktatóközpont (Hungarian)*