

Name of the subject: Informatics II	NEPTUN code: KMXIA3ABNE	Weekly hours: 2 2 lec+0 gs+ 0 lab	Credit: 3 Req: Examination
Subject leader: Dr. György Schuster	docent	Prerequisites: KMXPR2ABNE Programming II.	
Description of the subject:			
<p>Classification of operating systems. Structure and handling of POSIX compatible operating systems. Typical script language. History of script language. PERL evolution. Data types of PERL, operators of PERL, instruction of PERL. Subroutines and competence of variables. Modules, blocks. OOP in PERL. TK basics. Basic widgets MainWindow, Entry, Label, Button, Checkbutton. IPC basics in perl. Processes, threads, sockets. Metrix of information, entropy, channel capacity, redundancy. Code theory, fit codes, BCD codes, one-step codes, error corrector codes, Hamming codes, cyclic codes, CRC. CRC generation via hardware and software. RSA basics. Key generating, key changes. Mathematical background of RSA. Prime testing. Prime searching.</p>			
Literature:			
<p>Song Y. Yan, Cryptanalytic Attacks on RSA, Springer ISBN 0387487417 Steve Lidie, Nancy Walsh Meastering PERL-TK, O'reily ISBN 1-5659-2-716-8 Ellie Quigley, Perl by example, Prentice Hall , ISBN0136556892,evin</p>			
Remarks:			