

Subject name: Mainframes		NEPTUN code: AMIMFNKTNE	Weekly hours: 2 lec + 0 gs + 1 lab
Credit: 4 Requirement: Midterm note		Prerequisites: Computer Architectures I. and Operating Systems	
Subject leader: Dr. Márta Seebauer	Position: Assoc.Prof.	Faculty and Institute: Óbuda University, Alba Regia Technical Faculty, Institute of Engineering	
Process of evaluation and control: Tests and exam in E-learning system			
Description of the subject:			
<p>Introducing in mainframes: design concept and structured organization of computers zSeries, processors, memory, I/O system, communication channels, hardware management and virtualization. Basics of z/OS operating system: virtual memory management, interrupts, task management, work load manager, Unix system services. File system and file management, I/O services, system managed storage. Interactive management of operating system: file utilities, editor, searching, viewing. Batch processing: job utilities, job management, event handling and debugging. Programming of z/OS operating system: interpreter based programming languages (REXX, CLIST), third generation programming languages (COBOL, PLI, C, FORTRAN), translating and linking programs, system and user libraries, Java in z/OS environment. Application basics and components: network basics SNA and TCP/IP. transaction processes CICS, IMS, data base management DB2, IMS, message middleware MQ, Web: HTTP server, WAS. Configuration and management of z/OS, security: personal and user management, program and data security</p> <p>The main competences and professional skills gained by the students: HW and software management of mainframes, programming and application development basics in mainframe environment</p>			
Bibliography:			
<p>E-learning material of IBM based on ZF010: An Introduction to the Mainframe - z/OS Basics</p> <ol style="list-style-type: none"> 1. http://www.redbooks.ibm.com/abstracts/sg246366.html?Open 2. http://publib-b.boulder.ibm.com/abstracts/sg246981.html?Open 3. http://publib-b.boulder.ibm.com/abstracts/sg246982.html?Open 4. http://publib-b.boulder.ibm.com/abstracts/sg246983.html?Open 5. http://publib-b.boulder.ibm.com/abstracts/sg246984.html?Open 6. http://publib-b.boulder.ibm.com/abstracts/sg246985.html?Open 			