IFI7102	**Computer Skills and Programming Update**		
Study load: 3 (ECTS/EAP)	***Load of contact hours:*** 24	***Study semester:*** Fall 2012	Assessment
Objectives:	To bring particular computer and programming skills to the level required by the studies. To create opportunities for the development of Java-based applications. To introduce programming basis and object-oriented principles using Java programming language.		
Course outline:	The course is an update to particular software skills, hardware and network know-how for students outside of computer science. Includes introduction to basic programming, especially Java, with development of applications for small problems.		
Learning Outcomes:	Course participant has basic skills in computer use and programming. Using them, he can continue his studies in other courses which require knowledge about programming.		
Assessment Methods:	Pass/fail assessment. Each student must pass the assessment, which consists of individual homeworks defense and practical test.		
Teacher(s):	Isaias Barreto da Rosa, PhD		
Subject name in Estonian:	Arvuti kasutamise ja programmeerimise tasanduskursus		
Prerequisite subjekt(s):	-		
Compoulsory Literature:	Lewis, John and Loftus, William (2011) Java Software Solutions: Foundations of Program Design, 7/E Addison-Wesley. Boston. ISBN-13: 9780132149181.		
Replacement Literature:	Deitel, Paul and Deitel, Harvey (2011) Java How to Program, 9/e. Prentice Hall. Boston. ISBN-13: 9780132575669. It is also possible to use some tutorials and help materials available on the Internet		
Participation and Exam requirements:	− At least 90% of homework exercises must be submitted and correct − Every student must defend the submitted homework		
Independent work:	Practical exercises as homework assignments		
Grading criteria scale or the minimal level necessary for passing the subject:	The assessment test can be passed with at least 60% correct answers. Students may use all kind of materials but internet access will be disabled.		

Information about the course:

Sep 7 2012 3PM - 4.30PM	Course introduction; programming languages; first Java program; strings; Java IDEs; Netbeans working environment.
Sep 8 2012 10AM – 2PM	Declaration and usage of variables; primitive data types; creating expressions; type conversions; the scanner class; objects; classes; usage of classes and libraries; the math class; constructors;
Sep 21 2012 1PM – 5PM	Variable visibility; exercises with classes; static variable and methods; Output formatting; boolean expressions; conditions "if" and "else".
Sep 22 2012 10AM – 2PM	Comparison by data type; switch-case instruction; enumerated types; wrapper classes; autoboxing and unboxing; "while" loop; programming exercises; "do ... while" loop;
Oct 5, 2012 10AM – 1PM	"for" loop; reading text files; simple arrays.
Oct 6, 2012 10AM – 2PM	Programming exercises; multi-dimensional arrays; writing text files; exceptions
Oct 19, 2012 10AM – 1PM	JavaDoc; programming exercises