Course programme – IFI6075 Multimedia

Course code IFI6075	Multimedia		
ECTS credits: 4	Contact hours: 52	Semester: Autumn	Exam
Course objective:	The objective of the course is to provide theoretical knowledge (basics of design etc) and practical skills for the creation multimedia based software using different authoring tools and existing media files.		
Brief description of course content:	The nature and concept of multimedia. Authoring tools. Basic principals of design. Text (fonts and styles, usage). Use of computer graphics. Colours (colour theory, colour space, usage). Creating multimedia based software using authoring tool Adobe Flash. Course consists of seminar type lectures and practical classes where students are expected to be actively involved. Independent work: In addition every student must submit individual assignment, where (s)he demonstrates the ability and skill of creation of multimedia based applications.		
Learning outcomes:	A student has: • After this course student knows and understands the concept of multimedia; • basic design principles; the nature and usage of different types of digital media. • Student can choose multimedia elements appropriate for his or her aims; • can use at least one multimedia authoring tool and create multimedia based applications.		
Assessment methods:	Exam. Prerequisite for access to exam is active participation at lectures. To pass exam, students must pass written test (50% of grade) and complete practical exercise (50% of grade).		
Responsible lecturer:	Andrus Rinde		
Title in Estonian:	Multimeedium		
Prerequisite course:	IFI6001 – Effective Computer Usage		
Compulsory literature:	Lecture slides will be available on course's webpage: http://www.cs.tlu.ee/~rinde/oppetoo/2015/multimedia		
Replacement literature:	To pass this course student must participate in classes.		
Subscription to the course and exam:	Number of participants depends on size of computer lab. To access to exam student must submit all homework for deadline.		

Requirements for independent work:	Students must submit individual assignments, where he/she demonstrates the ability and skill of design and creation of multimedia based applications. Homework descriptions and deadlines are available on webpage http://www.cs.tlu.ee/~rinde/oppetoo/2015/multimedia.
Assessment criteria	Each higher level includes all the lower levels. 1. Design A – Is able to create balanced design, can take into account different design principles and explain his/her decisions. B – Is able to choose appropriate colour scheme for his/her multimedia application and explain it. C – Is able to choose suitable media elements and explain his/her choices. D –Is able to format good looking textual information taking into account readability issues. E – Knows most important design principles, can choose proportions and elements for user interface for his/her multimedia application. 2. Multimedia software development A – Is able to create multimedia applications which can communicate with other applications. B – Is able to create multimedia applications which uses external media and data files. C – Is able to manipulate with different objects, use different interaction methods. D – Is able to manipulate with different objects, create basic simulations. E – Is able to use multimedia authoring tools to create basic slide-show like applications.
Information about the content of the course:	The classes take place on Thursdays at 12:15 – 15:45
Week 1 – 03.09.2015	Lecture: Introduction to course, the concept and history of multimedia. Communication – why multimedia. Basics of animation. Exercise: Creating simple animations (animated gif).Adding animation to web page.
Week 2 – 10.09.2015	Exercise: Using animation software (i.e. Flash). Creating objects, animating objects using keyframes and tweening.
Week 3 – 17.09.2015	Lecture: Introduction to design, most important design principles. Exercise: Exercise: Morphing, masking. Guided animations.
Week 4 – 24.09.2015	Exercise: Using bitmap graphics in Flash, skeletal animation. Adding audio to animation. Revising exercises.

Week 5 – 01.10.2015	Lecture: Introduction to design of software user interface. Exercise: Creating web page with buttons and other tools for interaction.
Week 6 – 08.10.2015	Exercise: Basics of Javascript programming language. Handling pictures with Javascript.
Week 7 – 15.10.2015	Exercise: Handling events in Javascript, loops, conditions etc.
	WEEK FOR INDIVIDUAL WORK. NO CLASSES.
Week 8 – 29.10.2015	Lecture: Colours, Colour models, palettes. Principles of using colours. Drawing with Javascript. Setting colors with Javascript.
Week 9 – 05.11.2015	Exercise: Creating animations with Javascript.
Week 10 – 12.11.2015	Lecture: Text, history, principles of formatting, readability. Exercise: Manipulating text with Javascript.
Week 11 – 19.11.2015	Exercise: Creating animations with CSS3. Controlling animations with Javascript.
Week 12 – 26.11.2015	Lecture: Principles of using different media elements. Exercise: Using Javascript for media playback.
Week 13 – 03.12.2015	Exercise: Creating simple game with Javascript and using different media elements.
Week 14 – 10.12.2015	Q&A, revising exercises

Teaching Unit in charge:	Institute of Informatics/ School of Digital Technologies
Course programme is prepared by:	Andrus Rinde
Date:	14.08.2015

The course program is registered in the academic unit:

Date	21.08.2015
Name of academic coordinator	Liina Kirsipuu