

Course programme

Course code	COURSE TITLE		
IFI7202.DT	Multimedia Development		
ECTS credits: 4	Amount of contact lessons: 28	Teaching semester: Autumn	Assessment form: Exam
Course objectives:	The objective of the course is to provide theoretical knowledge (basics of design etc) and practical skills for the creation of web based multimedia applications using existing media files.		
Brief description of course content: (including the description of the independent work)	<p>The nature and concept of multimedia. Basic principals of design. Text (fonts and styles, usage). Use of computer graphics. Colours (colour theory, colour space, usage). Creating simple multimedia based software using HTML5, CSS and Javascript. Course consists of lectures and practical classes where students are expected to be actively involved.</p> <p>Independent work: In addition every student must submit individual assignment, where (s)he demonstrates the ability and skill of creation of multimedia based applications.</p>		
Learning outcomes:	<p>A student has:</p> <ul style="list-style-type: none"> • 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 her/his aims; • can create simple web based multimedia 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).		
Lecturer(s):	Andrus Rinde		
Course title in Estonian:	Multimeediumi arendamine		
Prerequisted course(s):	Basic knowledge and skills of using ICT (i.e. IFI6206.DT – Basics of the Digital Competencies)		
Compulsory literature:	Lecture notes		

Replacement literature:	To pass this course student must participate in classes.
Participation and exam requirements:	Number of participants depends on size of computer lab. To access to exam student must submit all homework for deadline.
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 in shared folder in Google Drive (created for this course and shared to participants only).
Grading criteria scale or the minimum level necessary for passing the subject:	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 course: (Topics by contact session, deadlines of	The classes take place on Wednesdays at 16:15 – 17:45

independent works and exams/assessments times)	
Week 1 – 06.09.2017	Lecture: Introduction to course, the concept and history of multimedia. Communication – why multimedia. Basics of animation. Exercise: Basics of HTML5.
Week 2 – 13.09.2017	Exercise: Basics of CSS3.
Week 3 – 20.09.2017	Exercise: Introduction to authoring tool “Google Web Designer”. Animations, pages, simple events.
Week 4 – 27.09.2017	Lecture: Introduction to design, most important design principles. Exercise: 3D in “Google Web Designer”. Using different components.
Week 5 – 04.10.2017	Exercise: Publishing from “Google Web Designer”. Simple web page with different media elements. Basics of Javascript programming language. changing pictures with Javascript.
Week 6 – 11.10.2017	Lecture: Principles of using different media elements. Exercise: Handling events in Javascript, loops, conditions etc.
Week 7 – 18.10.2017	Exercise: Creating animations with Javascript and CSS3 (transforms etc).
	WEEK FOR INDIVIDUAL WORK. NO CLASSES.
Week 8 – 01.11.2017	Lecture: Colours, Colour models, palettes. Principles of using colours. Exercise: Setting colors with Javascript.
Week 9 – 08.11.2017	Exercise: Events related to CSS3 animations. Controlling animations with Javascript.
Week 10 – 15.11.2017	Lecture: Text, history, principles of formatting, readability.

	Exercise: Manipulating text with Javascript.
Week 11 – 22.11.2017	Exercise: HTML canvas, drawing with Javascript.
Week 12 – 29.11.2017	Exercise: Manipulating graphics on HTML canvas.
Week 13 – 06.12.2017	Exercise: Using Javascript to control media playback.
Week 14 – 13.12.2017	Exercise: Creating simple game with Javascript and using different media elements.

Teaching Unit in charge:	School of Digital Technologies
Course programme is prepared by:	Andrus Rinde
Date:	16.08.2017

The course program is registered in the academic unit:

Date:	17.08.2017
Name of academic coordinator:	Kristi Oikimus