

## Course programme – IFI6075.DT Multimedia

Course code IFI6075.DT	Multimedia		
ECTS credits: 4	Contact hours: 56	Semester: Spring	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:	<p>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 simple multimedia based software using Javascript. Course consists of seminar type 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"> <li>• After this course student knows and understands the concept of multimedia;</li> <li>• basic design principles; the nature and usage of different types of digital media.</li> <li>• Student can choose multimedia elements appropriate for her aims;</li> <li>• can use at least one multimedia authoring tool and create multimedia based applications.</li> </ul>		
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:	Basic knowledge and skills of using ICT (i.e. IFI6001.DT – Effective Computer Usage)		
Compulsory literature:	Lecture notes.		
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 in shared folder in Google Drive (created for this course): <a href="https://drive.google.com/drive/folders/0B1ZtsSCdtRcATXQ2R0N3UTJPVmM?usp=sharing">https://drive.google.com/drive/folders/0B1ZtsSCdtRcATXQ2R0N3UTJPVmM?usp=sharing</a>
Assessment criteria	<p>Each higher level includes all the lower levels.</p> <p>1. Design</p> <p>A – Is able to create balanced design, can take into account different design principles and explain his/her decisions.</p> <p>B – Is able to choose appropriate colour scheme for his/her multimedia application and explain it.</p> <p>C – Is able to choose suitable media elements and explain his/her choices.</p> <p>D –Is able to format good looking textual information taking into account readability issues.</p> <p>E – Knows most important design principles, can choose proportions and elements for user interface for his/her multimedia application.</p> <p>2. Multimedia software development</p> <p>A – Is able to create multimedia applications which can communicate with other applications.</p> <p>B – Is able to create multimedia applications which uses external media and data files.</p> <p>C – Is able to manipulate with different objects, use different interaction methods.</p> <p>D – Is able to manipulate with different objects, create basic simulations.</p> <p>E – Is able to use multimedia authoring tools to create basic slide-show like applications.</p>
Information about the content of the course:	The classes take place on Mondays at 14:15 – 17:45
Week 1 – 30.01.2017	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 – 06.02.2017	Exercise: Introduction to authoring tool “Google Web Designer”. Animations, pages, simple events.
Week 3 – 13.02.2017	Lecture: Introduction to design, most important design principles. Exercise: 3D in “Google Web Designer”. Using different components.

Week 4 – 20.02.2017	Exercise: Publishing from “Google Web Designer”. Simple web page with different media elements. Basics of Javascript programming language. changing pictures with Javascript.
Week 5 – 27.02.2017	Lecture: Principles of using different media elements. Exercise: Handling events in Javascript, loops, conditions etc.
Week 6 – 06.03.2017	Exercise: Creating animations with Javascript and CSS3 (transforms etc).
Week 7 – 13.03.2017	Lecture: Colours, Colour models, palettes. Principles of using colours. Exercise: Setting colors with Javascript.
	WEEK FOR INDIVIDUAL WORK. NO CLASSES.
Week 8 – 27.03.2017	Exercise: Creating animations with CSS3. Events related to CSS3 animations. Controlling animations with Javascript.
Week 9 – 03.04.2017	Lecture: Text, history, principles of formatting, readability. Exercise: Manipulating text with Javascript.
Week 10 – 10.04.2017	Exercise: HTML canvas, drawing with Javascript.
Week 11 – 17.04.2017	Exercise: Manipulating graphics on HTML canvas.
Week 12 – 24.04.2017	Exercise: Using Javascript to control media playback.
Week 14 – 08.05.2017	Exercise: Creating simple game with Javascript and using different media elements.

Õppeainet kureeriv üksus:	Digitehnoloogiate instituut
Kursuseprogrammi koostaja	Andrus Rinde
Allkiri:	
Kuupäev:	03.01.2017

Kursuseprogramm registreeritud akadeemilises üksuses

Kuupäev	23.01.2017
Õppeassistendi nimi	Liina Kirsipuu

Allkiri	
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