

## „Digital media“ course program

Course code: IFI6022.DT	Digital Media		
Course volume ECP 4	Contact hours: 28	Teaching semester: Spring	Examination
Course aims:	A purpose of this subject is to enable the students to develop knowledge and competence of recording and editing different types of digital media. To develop competence of using digital audio- and video editing software.		
Brief description of course content:	<p>Different types of media, their representations in analog and digital form.</p> <p>Digital audio recording and editing. Audio compression. Digital video recording and editing. Different formats of digital video. Video compression. Basic special-effects.</p> <p>Description of independent work: Independent work includes creation and editing of audio and video clips.</p>		
Learning outcomes:	<p>After completing this course, students:</p> <p>Know different types of media, their representation in both – analog and digital form.</p> <p>Know principles of editing digital media.</p> <p>Are able to choose suitable tools for digital media editing.</p> <p>Can record and edit digital audio (including noise reduction, multitrack editing, etc.).</p> <p>Can record and edit digital video (including some basic special effects etc.).</p>		
Ways of assessment:	Exam. Exam contains written test based on lecture material and practical exercise.		
Teacher:	lecturer Andrus Rinde		
Subject title in Estonian:	Digitaalne meedia		
Study literature::	Teachers lecturing materials		
Replacement literature:	Replacement literature is not available, to pass this course student must participate in classes		

Requirements to access to exam:	To access to exam student must submit all homeworks for deadline.
Requirements for homework:	<p>Students have to create and edit different digital audio- and video clips for different purposes covering all topics discussed during the course.</p> <p>Homework descriptions and deadlines are available in courses shared folder:  <a href="https://drive.google.com/a/tlu.ee/folderview?id=0B1ZtsSCdtRcAN2cxR1ptRlhlMk0&amp;usp=sharing">https://drive.google.com/a/tlu.ee/folderview?id=0B1ZtsSCdtRcAN2cxR1ptRlhlMk0&amp;usp=sharing</a></p>
Evaluation criteria:	<p>Each higher level includes all the lower levels.</p> <p>1. Audio</p> <p>A – Knows properties of sound and relationships between them. Knows common values of frequencies and volume. Can create digital audio clips suitable for given purpose and save them in appropriate format.</p> <p>B – Knows different types of noise. Can use noise reduction tools.</p> <p>C – Knows principles of audio mixing. Can use multitrack editor to mix sound clips.</p> <p>D – Knows different types of audio editing tools and effects, their principles. Can edit audio using tools, suitable to achieve given goal.</p> <p>E – Knows important principles of digital audio recording. Knows important formats of digital audio. Can record digital audio, remove unwanted parts of recorded clip and apply basic effects.</p> <p>2. Video</p> <p>A – Knows principles of video compression. Can combine video with materials from different sources. Can save video into different formats suitable for given goal. Can create some basic special effects.</p> <p>B – Knows different keying effects and their principles. Can combine different clips using transparency etc.</p> <p>C – Knows important video effects and their usage. Can apply video effects, create and add titles, credits etc.</p> <p>D – Knows different formats of digital video ((DV, HD video, Windows Media Video, QuickTime etc.). Can sequence video clips, use transitions, add audio to video.</p> <p>E – Knows most important file formats of digital video. Can capture digital video, remove unwanted parts of recorded clip.</p>
Topics, times of contact hours:	Topics by weeks or lectures.

Week 1 – February 2, 10:15 – 11:45	Lecture: Digital vs Analog. Properties of sound. History of sound recording
Week 2 – February 9, 10:15 – 11:45	Lecture: Digital sound recording.  Exercise: Digital sound recording.
Week 3 – February 16, 10:15 – 11:45	Exercise: Most important tools of digital audio editing. Sound effects.
Week 4 – February 23, 10:15 – 11:45	Lecture: Noise and noise reduction.  Exercise: Noise reduction.
Week 5 – March 1, 10:15 – 11:45	Exercise: Multitrack audio editing.
Week 6 – March 8, 10:15 – 11:45	Lecture: Audio compression.  Exercise: Audio editing, individual exercise.
Week 7 – March 15, 10:15 – 11:45	Lecture: History of video. Properties of video. Digital video.
	WEEK FOR INDIVIDUAL WORK.
Week 8 – March 29, 10:15 – 11:45	Exercise: Digital video capture. Important video editing tools.
Week 9 – April 5, 10:15 – 11:45	Exercise: Video transitions, video effects.
Week 10 – April 12, 10:15 – 11:45	Exercise: Combining video with different visual material. Adding titles and credits.
Week 11 – April 19, 10:15 – 11:45	Lecture: Video compression.  Exercise: Exporting video into different formats..
Week 12 – April 26, 10:15 – 11:45	Exercise: Introduction to basic special effects..

Week 13 – May 3, 10:15 – 11:45	Exercise: Basic special effects. Individual exercise.
Week 14 – May 10, 10:15 – 11:45	Exercise: Revising homeworks, individual exercise.

Õppeainet kureeriv üksus:	Digitehnoloogiate instituut
Kursuseprogrammi koostaja	lekt. Andrus Rinde
Allkiri:	
Kuupäev:	06.01.2016

Kursuseprogramm registreeritud akadeemilises üksuses

Kuupäev	06.01.2016
Õppeassistendi nimi	Liina Kirsipuu
Allkiri	