Course programme

Course code	COURSE TITLE		
IFI7317.DT	Accessible Computing		
ECTS credits: 4 EAP/ECTS	Amount of contact lessons: 20	Teaching semester: Autumn	Assessment form: assessment
Course objectives:	To provide the student with a critical understanding of design for all principles and the latest practices with respect to a range of current and novel ICT solutions. To provide the student with a real world understanding of the complex needs of older and disabled people when using ICT and people who use assistive technologies.		
Brief description of course content: (including the description of the independent work)	The course covers the following topics: • Key principles of universal design; • National and international level guidelines of best practice, standards and recommendations (as applied); • User diversity; • Knowledge of stakeholders (marketing, software developers, designers, engineers); • Research paradigms (e.g. participatory design, inclusive design); • Understanding web accessibility and the benefits to people with and without disabilities; • Guidelines, recommendations and the national, EU and international framework; • Introduction to web components: accessibility guidelines for user agents (including assistive technologies), authoring tools, and web content; • Design and planning of accessible content; • Design and planning of accessible presentation and navigation; Planning for user evaluation and automated evaluation tools		
Learning outcomes:	On successful completion of the module the student will have the knowledge to be able to:		

	• Understand how Design for All ('DfA') can be applied as an enabler of accessibility and participation in the information society • Critically examine current national, EU and international issues of eInclusion including economic and social issues and the legal framework of web accessibility • Demonstrate a critical appreciation of the appropriate use of established accessibility guidelines, automated testing, and expert and live user testing in the design and evaluation of accessible websites, and methods of reporting results to different addressees e.g. to managers or designers • Demonstrate an understand the concepts of web accessibility and the role of web authoring tools and user agents in relation to the needs of people with and without disabilities, including users of assistive technologies, ageing, people with cognitive impairments or levels of literacy. • Demonstrate an understand of the practical and ethical issues of working with vulnerable groups of users
Assessment Methods:	Assessment
Lecturer(s):	Vladimir Tomberg
Course title in Estonian:	Digitaalse ligipääsetavuse töötuba
Prerequisted course(s):	N/A
Compulsory literature:	• Chisholm, W., May, M. (2008): Universal design for web applications that reach everyone. O'Reilly. • Caldwell, B., Cooper, M., Reid, L.R., Vanderheiden, G. (2008): Web Content Accessibility Guidelines (WCAG) 2.0. Available from http://www.w3.org/TR/WCAG20/
Replacement literature:	N/A
Participation and exam requirements:	All course assignments have to be implemented and student has to be ready to make the final presentation
Independent work:	• Students prepare presentations for each session during the seminar and implement one essay on selected topic
Grading criteria scale or the minimum level	A - 90-100% of the work is done - excellent: outstanding work with

necessary for passing the subject:	only few minor errors. B - 80-90% of the work is done – very good: above average work but with some minor errors. C - 70-80% of the work is done - good: generally good work with a number of notable errors. D - 60-70% of the work is done - satisfactory: reasonable work but with significant shortcomings. E - 50-60% of the work is done - sufficient: passable performance meeting the minimum criteria. F- less than 50% of the work is done - fail: more work is required before the credit can be awarded.
Information about the course: (Topics by contact session, deadlines of independent works and exams/assessments times)	07.09.2017 4h Session 1: Introduction, Accessibility concepts 21.09.2017 4h Session 2: Personal Human Characteristics 05.10.2017 2h Session 3: Workshop: applying UD framework 19.10.2017 4h Session 4: Web Accessibility: WCAG, WAI ARIA 02.11.2017 2h Session 5: Web Accessibility Workshop 16.11.2017 2h Session 6 : Final Reports 30.11.2017 2h Session 7: Final Reports

Teaching Unit in charge:	School of Digital Technologies
Course programme is prepared by:	Vladimir Tomberg
Date:	28.09.2017

The course program is registered in the academic unit:

Date:	28.09.2017

Name of academic coordinator:	Kristi Oikimus