

## Course programme

Course code IFI7169.DT	COURSE TITLE Accessibility Workshop		
ECTS credits: 4  (ECTS/EAP)	Amount of contact lessons: 16 hours	Teaching semester: Spring 2016	Assessment form: Exam
Course objectives:	<ul style="list-style-type: none"> <li>– To provide the student with an understanding of the social, economic, political and legislative issues of web accessibility</li> <li>– To provide a sound basis for designing and developing accessible websites</li> <li>– To provide an understanding of the role of accessible tools (e.g. authoring tools) and user agents (e.g. web browsers)</li> <li>– To provide a sound basis for both automated, expert, and user testing</li> <li>– To equip the student to subsequently be able to address technical issues of the underlying structures and tools which support accessibility, or the human issues of social interaction inherent in the applications.</li> </ul>		
Brief description of course content:  (including the description of the independent work)	<p>The course covers the following topics:</p> <ul style="list-style-type: none"> <li>– Understanding web accessibility and the benefits to people with and without disabilities;</li> <li>– Guidelines, recommendations and the national, EU and international framework;</li> <li>– Introduction to web components: accessibility guidelines for user agents (including assistive technologies), authoring tools, and web content;</li> <li>– Design and planning of accessible content;</li> <li>– Design and planning of accessible presentation and navigation;</li> <li>– Planning for user evaluation and automated evaluation tools</li> </ul>		
Learning outcomes:	<p>On successful completion of the module the student will have the knowledge to be able to:</p> <ul style="list-style-type: none"> <li>– Demonstrate an understanding of 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.</li> </ul>		

	<ul style="list-style-type: none"> <li>– Critically examine current national, EU and international issues of eInclusion including economic and social issues and the legal framework of web accessibility</li> <li>– 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</li> <li>– Demonstrate an understanding of the practical and ethical issues of working with vulnerable groups of users</li> </ul>
Assessment Methods:	<p>Student work should be assessable and gradable. The practical nature of this course can be assessed through the completion of 100% course work on different aspects of the design and evaluation of part of a website or more formally:</p> <ul style="list-style-type: none"> <li>– 50% examination</li> <li>– 50% course work to demonstrate accessibility features of webpage or web feature, report and log of group and individual work</li> </ul>
Lecturer(s):	Vladimir Tomberg, PhD
Course title in Estonian:	Ligipääsetavuse töötuba
Prerequisite course(s):	<ul style="list-style-type: none"> <li>– A basic knowledge of HTML, CSS and Javascript is required;</li> <li>– Understanding concepts of DfA is desirable</li> </ul>
Compulsory literature:	<ul style="list-style-type: none"> <li>– Caldwell, B., Cooper, M., Reid, L.R., Vanderheiden, G. (2008): Web Content Accessibility Guidelines (WCAG) 2.0. Available from <a href="http://www.w3.org/TR/WCAG20/">http://www.w3.org/TR/WCAG20/</a></li> </ul>
Replacement literature:	<ul style="list-style-type: none"> <li>– Chisholm, W., May, M. (2008): Universal design for web applications that reach everyone. O'Reilly.</li> <li>– Harper, S., Yesilada, Y. (2008): Web accessibility. Springer</li> <li>– Lawton Henry, S. (2007): Just Ask: Integrating Accessibility Throughout Design. Lulu.com. Available online at <a href="http://www.uiaccess.com/accessucd/index.html">http://www.uiaccess.com/accessucd/index.html</a></li> <li>– Lloyd, I. (2008): Build Your Own Web Site the Right Way Using HTML &amp; CSS. SITEPOINT; Edition 2 (30 Nov</li> </ul>

	<p>2008)</p> <ul style="list-style-type: none"> <li>– Thatcher, J., Burks, M., Heilemann, C., Lawton Henry, S. (2006): Web Accessibility: Web Standards and Regulatory Compliance. Friends of ED, 2006</li> </ul> <p>Web Accessibility Initiative: <a href="http://www.w3.org/WAI/">http://www.w3.org/WAI/</a> This W3C website includes materials which are in the process of being updated to reflect WCAG 2.0, and new work on ageing from WAI-AGE and on accessibility using mobile devices.</p>
Participation and exam requirements:	<p>This course is delivered partially online. Online activities are organized in biweekly modules, each focusing on a specific set of topics.</p> <p>The part of the course will consist of lectures and interactive learning sessions using real examples of good and bad practice, as well as the development of an early stage concept development, including:</p> <ul style="list-style-type: none"> <li>– Individual and group work to assess common barriers and best practice in accessible web design</li> <li>– Demonstrations of use of assistive technologies</li> <li>– Group work to apply automated tools and give feedback on the issues identified.</li> <li>– Individual development of prototype accessible web pages, using wire frame, storyboards or sample interactive demonstrations.</li> <li>– Working with code: testing and improving HTML code to make it compliant to WCAG 2.0, examination of WAI ARIA semantics in HTML.</li> </ul>
Independent work:	Essay and tests will be made by students independently.
Grading criteria scale or the minimum level necessary for passing the subject:	<p>The evaluation criteria:</p> <p>Grading criteria:</p> <p>A - 90-100% of the work is done - excellent: outstanding work with only few minor errors.</p> <p>B - 80-90% of the work is done -</p>

	<p>very good: above average work but with some minor errors.</p> <p>C - 70-80% of the work is done - good: generally good work with a number of notable errors.</p> <p>D - 60-70% of the work is done - satisfactory: reasonable work but with significant shortcomings.</p> <p>E - 50-60% of the work is done - sufficient: passable performance meeting the minimum criteria.</p> <p>F- less than 50% of the work is done - fail: more work is required before the credit can be awarded.</p>
<p>Information about the course:</p> <p>(Topics by contact session, deadlines of independent works and exams/assessments times)</p>	<p>Time schedule:</p> <p>03.03 14.00-17.30</p> <ul style="list-style-type: none"> <li>• Target user groups – Who benefits from accessible Web design?</li> <li>• Empathy exercise: using Web with limited abilities</li> <li>• Framework for Accessible Web</li> <li>• WCAG 2.0 – preparing for testing</li> </ul> <p>19.03 10.00-13.30</p> <ul style="list-style-type: none"> <li>• Presentation of the homework;</li> <li>• Framework for Accessible Web (continued);</li> <li>• Responsiveness exercise;</li> <li>• Discussion;</li> <li>• How to design accessible Web applications?</li> <li>• WCAG Requirements</li> <li>• WAVE Toolbar Demo</li> </ul> <p>15.04 10.15-13.45</p> <ul style="list-style-type: none"> <li>• Presentation of the Homework;</li> <li>• Alternative Input Devices;</li> <li>• Other Assistive Products;</li> <li>• Assistive Technology in different OS;</li> <li>• WAI ARIA Readers Demo;</li> <li>• Homework Assignment 3</li> </ul>

	<p>12.05 14.00-17.30</p> <ul style="list-style-type: none"> <li>• Presentation of the Homework;</li> <li>• WAI ARIA;</li> <li>• Core Components;</li> <li>• Abstract Roles;</li> <li>• Widget Roles;</li> <li>• Document Structure ROLES</li> <li>• Document landmarks roles</li> <li>• ARIA Properties And States</li> <li>• HTML5 AND WAI ARIA</li> <li>• WAI ARIA PROSPECT</li> <li>• Best Practices;</li> <li>• Homework Assignment 4</li> </ul>
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Teaching Unit in charge:	School of Digital Technologies
Course programme is prepared by:	Dr. V. Tomberg
Date:	01.01.2016

The course program is registered in the academic unit:

Date:	15.01.16
Name of academic coordinator:	Ingrid Sander