

# MGA 677 – Design for All (5 ECTS, 135h), fall 2017 (16 weeks)

**Instructors:** Dr. Alexandros Yertziotis ([alexis@idmaster.eu](mailto:alexis@idmaster.eu))

**Contact Details:** For efficient communication all email communication regarding this course should be sent to [alexis@idmaster.eu](mailto:alexis@idmaster.eu). Special online “office hours” will be set up for group and individual mentoring and those will be conducted through google hangout/chat.

**Course objectives:** The purpose of the course is to raise awareness on the topic of accessibility among teams that bring together a diverse range of skills and roles to the task of building products/services. Making decisions and taking actions that enable access for everyone ensures that the challenges that many people have with use of products/services have been considered in the design. This course focuses on Web accessibility in particular and aims to provide guidance on how to create websites and web applications that are accessible for everyone.

**Course content:** The course contains of following modules: 1. A Web for Everyone; 2. People First; 3. Clear Purpose: Well-Defined Goals; 4. Solid Structure: Built to Standards; 5. Easy Interaction: Everything Works; 6. Helpful Wayfinding: Guides Users; 7. Clean Presentation: Supports Meaning; 8. Plain Language: Creates a Conversation; 9. Accessible Media: Supports All Senses; 10. Universal Usability: Creates Delight; 11. In Practice: An Integrated Process; 12. The Future: Design for All; 13. Accessible UX Principles and Guidelines; 14. Mapping the WCAG 2.0 Principles, Guidelines, and Success Criteria to the Accessible UX Principles and Guidelines.

**Learning Outcomes:** Upon successful completion of the course, students will be able to: (a) Understand the principles and guidelines for an accessible UX; (b) Apply accessibility best practices and guidelines; (c) Understand how accessible design impacts people’s lives and reflect on the importance of an accessible UX; (d) Determine the conformance of Web sites to accessibility checks which can be executed automatically; (e) Perform accessibility checks which need to be evaluated manually.

**Workload:** In order to successfully conclude this course, students are required to do individual and group activities. Theoretical topics are presented as short modules through google classroom and other forms of synchronous and asynchronous communication.

Independent work is divided into five parts: work on *Assignments workbook* (approximately 15 hours); work on individual assignments (approximately 25 hours); work on group assignments (approximately 45 hours); work on literature (approximately 40 hours); work on a final presentation (approximately 10 hours).

**Assessment:** The exam grade consists of following components: individual assignments (30%); group assignments (40%), final presentation (10%); *Assignments workbook* (10%); overall participation (10%). Final mark will be on a 0-10 scale in increments of 0.5 points. Passing grade is 5 out of 10.

**Expected individual work activities:** Students will work individually, engaging in the following activities:

- Personal reflections on accessibility
- Understanding principles and guidelines for an accessible UX
- Working with personas to show how accessible design can have an impact on people's lives
- Examining case studies of different potential users, all with their own special set of needs
- Detailing how to achieve accessible UX principles through supporting guidelines related to strategy, design, content, and coding
- Understanding the role of different stakeholders and how they should be involved in achieving accessibility

Students will also be asked to keep an individual *Assignments workbook* to record both their individual and group activities.

The individual assignment script for sessions where individual work activities are planned will be announced before the respective sessions' starts. The style of the individual *Assignments workbook* will be announced on google classroom during the first few week of classes.

Late submissions will be penalised.

**Assessment criteria:** Grades will be based on these criteria:

91–100% of the work is done — excellent: outstanding work with only few minor errors.

81–90% of the work is done — very good: above average work but with some minor errors.

71–80% of the work is done — good: generally good work with a number of notable errors.

61–70% of the work is done — satisfactory: reasonable work but with significant shortcomings.

50–60% of the work is done — sufficient: passable performance meeting the minimum criteria.  
49% or less of the work is done — fail: more work is required before the credit can be awarded.

**Expected group work activities:** In addition to the individual work, students will be required to engage in group assignments too where they will demonstrate their abilities to plan, manage, collect, analyse and present results of accessibility evaluations with automated and/or manual testing.

The group assignment script for sessions where group work activities are planned will be announced before the respective sessions' start. As previously mentioned, you will also record you group activities in your *Assignments workbook*.

Late submissions will be penalised.

Assessment criteria: Grades will be based on these criteria:

91–100% of the work is done — excellent: outstanding work with only few minor errors.  
81–90% of the work is done — very good: above average work but with some minor errors.  
71–80% of the work is done — good: generally good work with a number of notable errors.  
61–70% of the work is done — satisfactory: reasonable work but with significant shortcomings.  
50–60% of the work is done — sufficient: passable performance meeting the minimum criteria.  
49% or less of the work is done — fail: more work is required before the credit can be awarded.

**Technology needed to perform this course:** Basic knowledge of computers and use of Google applications. There will be some accessibility tools that students will experiment with in certain assignments. Any guidance needed to use these tools will be provided to students.

**Synchronous activities:** The delivery of the course will be primarily asynchronous with discussions taking place mainly through the google classroom platform. In addition though, there will be set times for short synchronous sessions (either text chat or voice chat through google hangouts). In each session we will discuss acquired knowledge, provide feedback and/or mentor students. The times and days of these synchronous sessions will be decided and announced early in the semester.

**Required Textbook:** Horton, S. and Quesenbery, W. (2013), *A Web for Everyone: Designing Accessible User Experiences*, Rosenfeld Media, Brooklyn, NY.

(ISBN: 1-933820-97-7)

(Digital ISBN: 1-933820-39-X)

<http://rosenfeldmedia.com/books/a-web-for-everyone/> (For 20% discount use the code mga677)

<https://www.amazon.com/Web-Everyone-Designing-Accessible-Experiences/dp/1933820977>

**The pedagogical script for this course:**

Sessions	Topic/Materials	Tasks/assignments	Technology
<b>Session 0:</b> 28/8-03/09	Induction session: Getting familiar with the course environments and technologies  <b>Material:</b> Course pedagogical script	<b>Assignments:</b> 1) Read course Pedagogical script 2) Explore course Resources 3) Buy the required textbook 4) Watch these videos and think about the concept of accessibility for your induction assignment: a. BSI Documentary - Building accessibility: <a href="https://www.youtube.com/watch?v=-1xgTs28vXw">https://www.youtube.com/watch?v=-1xgTs28vXw</a> b. Microsoft Design - Introduction to Inclusive Design: <a href="https://www.youtube.com/watch?v=JzVgtfokboY">https://www.youtube.com/watch?v=JzVgtfokboY</a> c. David Berman - Web Accessibility Matters: Why Should We Care: <a href="https://www.youtube.com/watch?v=VIRx3RJzbZg&amp;t=63s">https://www.youtube.com/watch?v=VIRx3RJzbZg&amp;t=63s</a>	Google applications
<b>Session 1:</b> (04-17/09)	“A Web for Everyone” & “People First”  <b>Material:</b> Chapter 1 and 2 of the book  *Any supplementary resources that may be needed for this session will	In Chapter 1 a framework of principles and guidelines for an accessible user experience are introduced and in Chapter 2 the focus will be on introducing the personas of the book.  The main aims of this session will be to understand how the framework of principles and guidelines for an accessible user experience which are used in the book originated. Furthermore the personas will help you better empathise with users that have disabilities because you will better understand their needs and abilities. This will aid in making more informed design decisions.	Google Hangout and classroom

	be provided on Google classroom.	<b>Assignments:</b> <ol style="list-style-type: none"> <li>1) Read and understand the material.</li> <li>2) Participate in a synchronous/asynchronous communication.</li> </ol>	
	Work on your workbook and individual assignment	<b>Assignments:</b> <ol style="list-style-type: none"> <li>1) Read the assignment script</li> <li>2) Complete the assignment in accordance to the assignment script provided.</li> <li>3) Start developing your workbook (<i>Assignments</i>)</li> </ol>	Google classroom
<b>Session 2:</b> (18/09-01/10)	“Clear Purpose: Well-Defined Goals” & “Solid Structure: Built to Standards”  <b>Material:</b> Chapter 3 and 4 of the book  *Any supplementary resources that may be needed for this session will be provided on Google classroom.	In Chapter 3 the focus will be on the principle of “ <b>Clear Purpose</b> ” and in Chapter 4 the focus will be on the principle of “ <b>Solid Structure</b> ”.  The main aims of this session will be to demonstrate how these two principles are enacted in the “real world” and why they are important for the web. Furthermore, supporting guidelines that help achieve both these principles are presented. The relevant WCAG 2.0 principles, guidelines, and success criteria that relate to the two principles are also discussed.  <b>Assignments:</b> <ol style="list-style-type: none"> <li>1) Read and understand the material.</li> <li>2) Participate in synchronous/asynchronous communication.</li> </ol>	Google Hangout and classroom
	Work on your workbook and individual assignment	<b>Assignments:</b> <ol style="list-style-type: none"> <li>1) Read the assignment script</li> <li>2) Complete the assignment in accordance to the assignment script provided.</li> <li>3) Continue developing your workbook (<i>Assignments</i>)</li> </ol>	Google classroom

<p><b>Session 3:</b> (02-15/10)</p>	<p>“Easy Interaction: Everything Works” &amp; “Helpful Wayfinding: Guides Users”</p> <p><b>Material:</b> Chapter 5 and 6 of the book</p> <p>*Any supplementary resources that may be needed for this session will be provided on Google classroom.</p>	<p>In Chapter 5 the focus will be on the principle of “<b>Easy Interaction</b>” and in Chapter 6 the focus will be on the principle of “<b>Helpful Wayfinding</b>”.</p> <p>The main aims of this session will be to demonstrate how these two principles are enacted in the “real world” and why they are important for the web. Furthermore, supporting guidelines that help achieve both these principles are presented. The relevant WCAG 2.0 principles, guidelines, and success criteria that relate to the two principles are also discussed.</p> <p><b>Assignments:</b></p> <ol style="list-style-type: none"> <li>1) Read and understand the material.</li> <li>2) Participate in synchronous/asynchronous communication.</li> </ol>	<p>Google Hangout and classroom</p>
	<p>Work on your workbook and individual assignment</p>	<p><b>Assignments:</b></p> <ol style="list-style-type: none"> <li>1) Read the assignment script</li> <li>2) Complete the assignment in accordance to the assignment script provided.</li> <li>3) Continue developing your workbook (<i>Assignments</i>)</li> </ol>	<p>Google classroom</p>
<p><b>Session 4:</b> (16/10-29/10)</p>	<p>Individual meetings and Group mentoring</p>	<p><b>Assignments:</b></p> <ol style="list-style-type: none"> <li>1) Participate in a synchronous communication to review the content that has been covered to this point and discuss the individual assignments.</li> <li>2) Students have the opportunity to catch-up on any assignments from Sessions 0-3 that have not yet been submitted. *There will be penalties on overdue assignments. The highest mark that can be achieved for an overdue assignment is 7/10.</li> </ol>	<p>Google Hangout and classroom</p>
<p><b>Reading and Reflections Week:</b></p>	<p>Reading and Reflections Week</p>	<p>Students use this week to reflect on progress and prepare for the second part of the semester.</p>	

(30/10-05/11)			
<b>Session 5:</b> (06-19/11)	<p>“Clean Presentation: Supports Meaning” &amp; “Plain Language: Creates a Conversation”</p> <p><b>Material:</b> Chapter 7 and 8 of the book</p> <p>*Any supplementary resources that may be needed for this session will be provided on Google classroom.</p>	<p>In Chapter 7 the focus will be on the principle of “<b>Clean Presentation</b>” and in Chapter 8 the focus will be on the principle of “<b>Plain Language</b>”.</p> <p>The main aims of this session will be to demonstrate how these two principles are enacted in the “real world” and why they are important for the web. Furthermore, supporting guidelines that help achieve both these principles are presented. The relevant WCAG 2.0 principles, guidelines, and success criteria that relate to the two principles are also discussed.</p> <p><b>Assignments:</b></p> <ol style="list-style-type: none"> <li>1) Read and understand the material.</li> <li>2) Participate in synchronous/asynchronous communication.</li> </ol>	Google Hangout and classroom
	Work on your workbook and group assignment	<p><b>Assignments:</b></p> <ol style="list-style-type: none"> <li>1) Read the assignment script</li> <li>2) Complete the assignment in accordance to the assignment script provided.</li> <li>3) Continue developing your workbook (<i>Assignments</i>)</li> </ol>	
<b>Session 6:</b> (20/11-03/12)	<p>“Accessible Media: Supports All Senses” &amp; “Universal Usability: Creates Delight”</p> <p><b>Material:</b> Chapter 9 and 10 of the book</p> <p>*Any supplementary resources that may be</p>	<p>In Chapter 9 the focus will be on the principle of “<b>Accessible Media</b>” and in Chapter 10 the focus will be on the principle of “<b>Universal Usability</b>”.</p> <p>The main aims of this session will be to demonstrate how these two principles are enacted in the “real world” and why they are important for the web. Furthermore, supporting guidelines that help achieve both these principles are presented. The relevant WCAG 2.0 principles, guidelines, and success criteria that relate to the two principles are also discussed.</p>	Google Hangout and classroom

	needed for this session will be provided on Google classroom.	<b>Assignments:</b> <ol style="list-style-type: none"> <li>1) Read and understand the material.</li> <li>2) Participate in synchronous/asynchronous communication.</li> </ol>	
	Work on your workbook and group assignment	<b>Assignments:</b> <ol style="list-style-type: none"> <li>1) Read the assignment script</li> <li>2) Complete the assignment in accordance to the assignment script provided.</li> <li>3) Continue developing your workbook (<i>Assignments</i>)</li> </ol>	Google classroom
<b>Session 7:</b> (04-17/12)	<p>“In Practice: An Integrated Process” &amp; “The Future: Design for All”</p> <p><b>Material:</b> Chapter 11 and 12 of the book</p> <p>*Any supplementary resources that may be needed for this session will be provided on Google classroom.</p>	<p>In Chapter 11 the focus will be on integrating accessibility best practices into the work environment and in Chapter 12 the focus will be on understanding the potential of web accessibility in the future.</p> <p>The main aims of this session will be to demonstrate how integrating accessibility best practices within an organisation can lead to a reality where accessibility is considered as a core value in the design of products/services. Furthermore, future insights into what a web that is inclusive for all means, is discussed.</p> <p><b>Assignments:</b></p> <ol style="list-style-type: none"> <li>1) Read and understand the material.</li> <li>2) Participate in synchronous/asynchronous communication.</li> </ol>	Google Hangout and classroom
	Work on your workbook and group assignment	<b>Assignments:</b> <ol style="list-style-type: none"> <li>1) Read the assignment script</li> <li>2) Complete the assignment in accordance to the assignment script provided.</li> <li>3) Continue developing your workbook (<i>Assignments</i>)</li> </ol>	Google classroom
<b>Session 8:</b> (18-24/12)	Presentation of the final projects	<b>Assignments:</b> <ol style="list-style-type: none"> <li>1) The project is presented.</li> <li>2) The <i>Assignments workbook</i> is presented.</li> </ol>	Google presentation and documents



