MGA 677 - Universal Design (6 ECTS, 135h), autumn 2023 (16 weeks)

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Contact Details: For efficient communication all email communication regarding this course should be sent to
sonia.andreou@idmaster.eu.
Special online "office hours" will be set up for group and individual mentoring and those will be conducted through google hangouts/chat.

Course objectives: The purpose of the course is to raise awareness on the topic of universal design among teams that bring together a diverse range of skills and roles to building universal 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 universal, thus 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 that support universal design;
(c) Understand how universal design impacts people's lives and reflect on the importance of an accessible UX;
(d) Determine the conformance of Web sites against accessibility checks which can be executed automatically;
(e) Perform accessibility checks which need to be evaluated manually.
(f) Support universal design practice through the implementation of (d) and (e).

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 four parts:
(a) Work on individual assignments (approximately 25 hours);
(b) Work on group assignments (approximately 50 hours);
(c) Work on literature (approximately 40 hours);
(d) Work on a final presentation (approximately 20 hours).

Assessment: The exam grade consists of following components:
(a) Individual assignments (30%);
(b) Group assignments (40%),
(c) Final presentation (20%);
(d) 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 universal design
● Understanding principles and guidelines for an accessible UX
● Working with personas to show how universal 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 universal design

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. The highest mark that can be obtained for a late assignment submission is 7/10.

Assessment criteria (individual work activities)**:** Grades will be based on these criteria:
A = 10 (91–100% of the work is done) — excellent: outstanding work with only few minor errors.
B = 9 or 8 (81–90% of the work is done) — very good: above average work but with some minor errors.
C = 7 (71–80% of the work is done) — good: generally good work with a number of notable errors.
D = 6 (61–70% of the work is done) — satisfactory: reasonable work but with significant shortcomings.
E = 5 (50–60% of the work is done) — sufficient: passable performance meeting the minimum criteria.
F = 1, 2, 3, 4 (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, thus measuring conformance towards universal design.

The group assignment script for sessions where group work activities are planned will be announced before the respective sessions' start.

Late submissions will be penalised. The highest mark that can be obtained for a late assignment submission is 7/10.

Assessment criteria (group work activities): Grades will be based on these criteria:
A = 10 (91–100% of the work is done) — excellent: outstanding work with only few minor errors.
B = 9 or 8 (81–90% of the work is done) — very good: above average work but with some minor errors.
C = 7 (71–80% of the work is done) — good: generally good work with a number of notable errors.
D = 6 (61–70% of the work is done) — satisfactory: reasonable work but with significant shortcomings.
E = 5 (50–60% of the work is done) — sufficient: passable performance meeting the minimum criteria.
F = 1, 2, 3, 4 (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 during the semester.

Required Textbook: Horton, S. and Quesenbery, W. (2013). *A web for everyone: Designing accessible user experiences.* Rosenfeld Media.
(ISBN: 1-933820-97-7)
(Digital ISBN: 1-933820-39-X)
http://rosenfeldmedia.com/books/a-web-for-everyone/
https://www.amazon.com/Web-Everyone-Designing-Accessible-Experiences/dp/1933820977

The pedagogical script for this course:

Sessions	Topic/Materials	Tasks/assignments	Technology

Session 1: (6/09-19/09)	Getting familiar with the course environments and technologies and the course topic.
	
	Material: Course pedagogical script and related videos
	
	Work on your individual assignment
		Assignments:
		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 assignment:
		   a. BSI Documentary - Building accessibility:
		https://www.youtube.com/watch?v=-1xgTs28vXw
		   b. Microsoft Design - Inclusive Skype Communication:
		https://youtu.be/xirepJRYW7U
		   c. David Berman - Web Accessibility Matters: Why Should We Care:
		https://www.youtube.com/watch?v=VIRx3RJzbZg
			Google Classroom/Hangouts

| **Session 2:** (20/09-03/10) | "A Web for Everyone" & "People First"

Material: Chapter 1 and 2 of the book

Work on your individual assignment

*Any supplementary resources that may be needed for this session will be provided on Google classroom. | 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.

Assignments:
1) Read and understand the material.
2) Participate in synchronous/asynchronous communication.
3) Read the assignment script.
4) Complete the assignment in accordance to the assignment script provided.
5) Complete the "***Personas***" Google sheet with the required information. | Google Classroom/Hangouts |
| **Session 3:** (04/10-17/10) | "Clear Purpose: Well-Defined Goals" & "Solid Structure: Built to Standards"

Material: Chapter 3 and 4 of the book
Work on group assignment 1 | In Chapter 3 the focus will be on the principle of "**Clear Purpose**" and in Chapter 4 the focus will be on the principle of "**Solid Structure**".

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. | Google Classroom/Hangouts |

	*Any supplementary resources that may be needed for this session will be provided on Google classroom.	**Assignments:** 1) Read and understand the material. 2) Participate in synchronous/asynchronous communication. 3) Read the assignment script. 4) Complete the assignment in accordance to the assignment script provided.	
Session 4: (18/10-31/10)	"Clean Presentation: Supports Meaning" & "Plain Language: Creates a Conversation" **Material**: Chapter 7 and 8 of the book Work on your group assignment 2 *Any supplementary resources that may be needed for this session will be provided on Google classroom. **In reflection week 1, you will have the opportunity to read chapters' 5 and 6.	In Chapter 7 the focus will be on the principle of "**Clean Presentation**" and in Chapter 8 the focus will be on the principle of "**Plain Language**". 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. **Assignments:** 1) Read and understand the material. 2) Participate in synchronous/asynchronous communication. 3) Read the assignment script. 4) Complete the assignment in accordance to the assignment script provided.	Google Classroom/Hangouts

Reading and Reflection Week (01/11-07/11)	Reading and Reflection Week Overdue assignments Unread chapters	Use this week to reflect on progress and prepare for the second part of the semester. **Assignments:** 1) Students have the opportunity to catch-up on any assignments from Sessions 1-5 that were not submitted. *There will be penalties on overdue assignments. The highest mark that can be achieved for an overdue assignment is 7/10. 2) Read Chapters 5 and 6 of the book. The focus in Chapter 5 is on the principle of "Easy Interaction" and in Chapter 6 the focus will be on the principle of "Helpful Wayfinding".	
Session 5: (08/11-21/11)	"Accessible Media: Supports All Senses" & "Universal Usability: Creates Delight" **Material**: Chapter 9 and 10 of the book Work on group assignment 2 *Any supplementary resources that may be needed for this session will be provided on Google classroom.	In Chapter 7 the focus will be on the principle of "**Clean Presentation**" and in Chapter 8 the focus will be on the principle of "**Plain Language**". 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. **Assignments:** 1) Read and understand the material. 2) Participate in synchronous/asynchronous communication. 3) Read the assignment script. 4) Complete the assignment in accordance to the assignment script provided.	Google Classroom/Hangouts

Session 6: (22/11-05/12)	"In Practice: An Integrated Process" & "The Future: Design for All" **Material**: Chapter 11 and 12 of the book Work on group assignment 2 *Any supplementary resources that may be needed for this session will be provided on Google classroom.	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. 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. **Assignments:** 1) Read and understand the material. 2) Participate in synchronous/asynchronous communication. 3) Read the assignment script. 4) Complete the assignment in accordance to the assignment script provided.	Google Classroom/Hangouts
Session 7: (06/12-19/12) Presentation of the final projects or other forms of final assessment	Read all chapters Final presentation	**Final Presentation:** 1) Prepare and present a final presentation (topic to be announced).	Google Classroom/Hangouts /presentation