COURSE SYLLABUS

Course Title	Course Code	Semester	Course Hour/Week		Credit	ECTS
Assistive Technology	VCDE 411	7	**Theory** 3	**Practice** 0	3	5
Course Type	Compulsory Course	Department Elective	Faculty Elective	University Elective	CoHE (YÖK) Elective	Other
	-	YES	-	-	-	-
Level of Course	Associate Degree (Short Cycle)		Undergraduate (First Cycle)		Graduate/ Doctoral (Second /Third Cycle)	
	-		Yes		-	

Language of Instruction	English

Course Instructor(s)	Dr. Masoud Moradi	E-mail : masoud.moradi@arucad.edu.tr Office : TI-OFF18
Course Objectives	The objective of this course is to provide students with a comprehensive understanding of assistive technologies and their application in visual communication for individuals with disabilities. Additionally, students will be introduced to emerging technologies, including AI tools like ChatGPT, that are revolutionizing the field of visual communication design. Students will explore various types of assistive and innovative technologies, accessibility principles, legal frameworks, and ethical considerations. The course emphasizes both the societal impact and the future trends of assistive and emerging technologies in promoting inclusion and enhancing creativity in digital communication.	

Course Learning Outcomes	**Students will able to:**	**Teaching Methods**	**Evalutation Methods**
	Explain the role of assistive technology (AT) in visual-communication design.	- Lectures -case studies	- Midterm Exam - Final Exam - Project Work

	Identify key AT and AI tools (screen readers, eye-tracking, ChatGPT, Adobe Sensei).	- Lectures - In-class discussions - Group search	- Presentations - Final Exam
	Evaluate societal impact, legal frameworks (WCAG, ADA) and ethical issues..	Debates, reading circles	- Midterm Exam - Final Exam
	Discuss future trends and challenges for AI-driven visual-communication design	Lectures	Final Exam Presentations
Course Content	The course will cover the following topics: • Introduction to Assistive Technology in Visual Communication • Accessibility Principles in Design • Legal Frameworks and Ethical Considerations for Assistive Technology • The Role of AI in Design: ChatGPT and Generative AI Tools • AI-Powered Tools like Adobe Sensei in Visual Communication • Universal Design Principles and Inclusive Thinking • The Future of Assistive and Emerging Technologies in Visual Communication		

COURSE OUTLINE/SCHEDULE			
Week	**Topic**	**Implementation (theory/practice)**	**Required Reading, Preliminary preparation**
1	Course overview	T	Instructor Notes
2	Introduction to Assistive Technology in Visual Communication	T	Doing Disability Differently An alternative handbook on architecture, dis/ability and designing for everyday life Jos Boysby Boys, Jos tems available for reference: ARUCAD: Not For Loan (1)Call number: REF NA2545.A1 .B69 2014.
3	Accessibility Principles and Universal Design	T	Doing Disability Differently An alternative handbook on architecture, dis/ability and designing for everyday life Jos Boysby Boys, Jos tems available for reference: ARUCAD: Not For Loan (1)Call number: REF NA2545.A1 .B69 2014.

4	Assistive Technologies for Visual Impairments	T	Doing Disability Differently An alternative handbook on architecture, dis/ability and designing for everyday life Jos Boysby Boys, Jos tems available for reference: ARUCAD: Not For Loan (1)Call number: REF NA2545.A1 .B69 2014.
5	AI in Visual Communication: ChatGPT and Generative AI Tools	T	Instructor Notes
6	AI-Powered Tools	T	Instructor Notes
7	Assistive Technologies for Auditory and Cognitive Impairments	T	Instructor Notes
8	**MIDTERM WEEK**	**Midterm**	
9	AI in Branding and Marketing	T	Doing Disability Differently An alternative handbook on architecture, dis/ability and designing for everyday life Jos Boysby Boys, Jos tems available for reference: ARUCAD: Not For Loan (1)Call number: REF NA2545.A1 .B69 2014.
10	Future Trends in Assistive and AI-Based Visual Communication Design	T	Instructor Notes
11	Ethical Challenges of Using AI in Creative Work	T	Instructor Notes
12	Assistive Technology for Disabled Artists and Designers Assistive Technologies in Educational Settings for Disabled People	T	Augmentation technologies and artificial intelligence in technical communication : designing ethical futures / Ann Hill Duin and Isabel Pedersen.
13	Assistive Technology in Virtual and Augmented Reality for Disabilities	T	Augmentation technologies and artificial intelligence in technical communication : designing ethical futures / Ann Hill Duin and Isabel Pedersen.
14	Assistive Technology in Virtual and Augmented Reality for Disabilities	T	Augmentation technologies and artificial intelligence in technical

			communication : designing ethical futures / Ann Hill Duin and Isabel Pedersen.
15	Review	T	Instructor Lecture notes
16	Final Exam	**T**	

Required Course Material(s) / Reading(s)/ Text Book(s)	Doing Disability Differently An alternative handbook on architecture, dis/ability and designing for everyday life Jos Boysby Boys, Jos tems available for reference: ARUCAD: Not For Loan (1)Call number: REF NA2545.A1 .B69 2014. Augmentation technologies and artificial intelligence in technical communication : designing ethical futures / Ann Hill Duin and Isabel Pedersen. Availability: Items available for loan: ARUCAD (1)Call number: T10.5 .D85 2023.
Recommended Course Material(s)/ Reading(s) /Other	**Recommended Readings:** Articles on AI in creative industries and assistive technology advancements.

ASSESSMENT		
Learning Activities	**NUMBER**	**WEIGHT in %**
Mid-Term	1	40
Quiz		
Assignment		
Project		
Field Study		
Presentation / Seminar	1	20
Studio Practice		

Other		
Contribution of Final Examination/Final Project/ Dissertation to the Final Grade	1	40
TOTAL		100

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME LEARNING OUTCOMES

No	PROGRAMME LEARNING OUTCOMES	Level of Contribution (1-lowest/ 5-highest)				
		1	2	3	4	5
1	Knows the historical development of the field of communication, basic concepts, theories and research methods.		シ			
2	Knows the principles and elements of basic design.		シ			
3	Knows the history, theories and theorists of visual communication.	シ				
4	Knows advanced practical skills in various commercial and creative contexts, including graphic and audiovisual multimedia design.				シ	
5	Knows national and international ethical rules, standards and legal documents on communication and visual communication design.			シ		
6	Able to use the tools, methods and techniques and computer software required for visual communication design applications.			シ		
7	Able to produce innovative and original works that reflect abstract and concrete concepts by emphasizing creativity					シ
8	Has the knowledge and skills to transform creative and innovative ideas into graphic, photographic, typographic, illustrative, 2 and 3-dimensional, animated and interactive visual expressions.					シ
9	Applies visual communication design techniques with design technologies in developing and changing media environments.				シ	
10	Has the competence to create visuals with designs that emphasize aesthetics in design processes.			シ		
11	Has the competence to define the problem, solve the problem, plan, manage the project and present in the design-based project development process.		シ			

12	Has the ability to use research methods and techniques in the field of Visual Communication.				シ	
13	Has the competence to research, plan, implement and report during the project phase.			シ		
14	Has the competence to establish the connection between design and aesthetic values.		シ			
15	Has the competence to interpret universal visual culture and associate the ties of symbols with universal visual culture.		シ			

ECTS / STUDENT WORKLOAD				
ACTIVITIES	**NUMBER**	**UNIT**	**HOUR**	**TOTAL (WORKLOAD)**
Course Teaching Hour (X weeks * total course hours)	15		3	45
Preliminary Preparation and self- study	15		3	45
Mid-Term	1		10	10
Quiz				
Assignment				
Project				
Field Study				
Presentation / Seminar	1		10	10
Studio Practice				
Final Examination/ Final Project/ Dissertation	1		15	15
Other				
TOTAL WORKLOAD				125
TOTAL WORKLOAD / 25				5
ECTS				5

ETHICAL RULES WITH REGARD TO THE COURSE
Plagiarism Disclaimer Detected and undetected plagiarism is a serious offence at any time and it could have devastating effects on your degree result and future professional life. Plagiarism is easy to avoid if you make sure you thoroughly identify and recognize your sources and do not copy from visual examples, designs or notes taken directly from your sources word for word. The maximum citation limit cannot exceed 20%. Artificial intelligence citations are also considered within this scope. If proven otherwise, the student will fail the course.

	SDG 1: No Poverty	×
	SDG 2: Zero Hunger	×
	SDG 3: Good Health and Well-Being	√
	SDG 4: Quality Education	√
	SDG 5: Gender Equality	×
	SDG 6: Clean Water and Sanitation	×
	SDG 7: Affordable and Clean Energy	×
	SDG 8: Decent Work and Economic Growth	×
	SDG 9: Industry, Innovation and Infrastructure	√
	SDG 10: Reduced Inequalities	√
	SDG 11: Sustainable Cities and Communities	×
	SDG 12: Responsible Consumption and Production	×
	SDG 13: Climate Action	×
	SDG 14: Life Below Water	×
	SDG 15: Life on Land	√

.

	SDG 16:Peace, Justice and Strong Institutions	√
	SDG 17:Partnership for the Goals	×

ASSESSMENT DETAILS AND EVALUATION CRITERIA:	
Final Grades will be determined according to the Course Learning Activities and Studio practice combined with assignments with a numeric value of both, and comply by the Education and Examination Regulation set forth by the University. 70% attendance to courses is compulsory. Health reports belong to 30% absenteeism right.	
PREPARED BY	Dr. Masoud Moradi
UPDATED	26/10/2025
APPROVED	