COURSE SYLLABUS

Course Title	**Course Code**	**Semester**	**Course Hour/Week**		**Credit**	**ECTS**
Assistive Technology	GAME 315	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.	X				
2	Knows the basic concepts and terminology related to the field of game design.		X			
3	Has knowledge about the history of computer and video games and developments in this field.			X		
4	Knows game design processes and related applications.			X		
5	Has the ability to utilize various disciplines such as communication, art, music, psychology, mythology, cinema, etc. in the game design process.				X	
6	Has the ability to analyse analog and digital game genres.	X				
7	Has the ability to use contemporary game engines and problem solving skills.				X	
8	Has the knowledge of questioning the game designs with an analytic and critical perspective.			X		
9	Has knowledge about media literacy.				X	
10	Has the competence to prepare projects based on ethical principles in game development processes.				X	

11	Has the competence to evaluate games as an art form.		X			
12	Has the competence to use game design concepts and methods in related fields such as design, software development and media.			X		
13	Has the competence to take part and responsibility in game development teams.			X		
14	Has the competence to collect, analyze and interpret analytical data about games and players.	X				
15	Has the competence to develop and present a digital game project by using game design practices effectively.	X				
16	Evaluates artificial intelligence applications in their studies with a critical approach in terms of aesthetics and originality, and uses them in accordance with ethical rules.				X	

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

	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	×

ETHICAL RULES WITH REGARD TO THE COURSE
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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	