COURSE SYLLABUS						
Course Title	**Course Code**	**Semester**	**Course Hour/Week**		**Credit**	**ECTS**
Studio 1	INDD101	1	**Theory** 2	**Practice** 8	6	9
Course Type	**Compulsory Courses**	**Department Elective**	**Faculty Elective**	**University Elective**	**CoHE (YÖK) Compulsory**	**Other**
	x					
Level of Course	**Associate Degree (Short Cycle)**		**Undergraduate (First Cycle)**		**Graduate / Doctoral (Second / Third Cycle)**	
			x			

Language of Instruction	English

Course Instructor(s)	Asst. Prof. Dr. Saloumeh Khayyat Kahouei	E-mail: khayyat.kahouei@arucad.edu.tr Office: Eternal Spring building office 3
Course Objectives	**Preliminary industrial design exploration.** In Studio 1, students will have their **first design experience**, undertaking a preliminary exploration of the range of issues, skills and techniques vital to the realisation of resolved product and object design. This studio aims to provide students with the foundational knowledge and skills necessary to approach the Industrial Design field. Studio 1 places a strong emphasis on collaboration and **project-based learning.** Students will learn *how to approach a design challenge, going step by step from the problem identification to the realisation of a final product through sketches, technical drawings and physical models*. Students will have an initial approach to the Design Thinking process and techniques. Also, Studio 1 introduces students to the main elements of industrial design including usability, form language, drawing and low-fidelity prototyping. The project work will be presented in digital and printed format. A final digital presentation should show the project's evolution. Sketches, technical drawings and prototypes will be realised without the support of CAD and presented in their original version too.	

Course Learning Outcomes	**Students To Do:**	**Teaching Methods**	**Evaluation Methods**
	Identify and define the fundamental elements, principles, and vocabulary of industrial design.	Direct instruction, visual analysis.	Quiz, participation.
	Explain and summarize the relationship between form, function, and meaning in product design.	Case study discussions, lecture.	Midterm evaluation.
	Apply the design thinking process to analyze and improve existing products.	Studio exercises, guided practice.	Midterm and project assessment.
	Develop creative design solutions and prototypes through sketching, technical drawing, and low-fidelity modeling.	Studio practice, hands-on workshops.	Midterm and final project.
	Evaluate design concepts based on usability, aesthetics, and innovation criteria.	Critique sessions, peer feedback.	Project critiques, presentation.
	Create original design proposals demonstrating understanding of composition, proportion, and human-centered design.	Studio work, model making, visualization exercises.	Final jury and presentation.

	Communicate design ideas effectively using visual and verbal presentation tools.	Individual presentation and discussion.	Final presentation and report.
Course Content	Students will work on a small-scale project of simple geometry. Students will go through the analysis of an existing object to its re-design defining an innovative version/use of it. Students will be asked to go through problem identification, case studies research phase, sketches, dimensions definition, basic aesthetics aspects such as colours, patterns, shapes, technical drawings and prototyping.		

COURSE OUTLINE/SCHEDULE			
Week	**Topic**	**Implementation (theory/practice)**	**Required Reading, Preliminary preparation**
1	The purpose and contents of the course, Introduction. What is design?	T-P	See the required readings.
2	Introduction to the concept of design, composition, the design elements and design principles. The Gestalt Theory and the Gestalt Principles of Design. In-Class ExerciseDesign of a composition using the design elements of points .	T-P	A set of design materials is required. Development of a composition using point.
3	10 principles of good design. Purpose, sustainability. In-Class Exercise**:** Design of a composition using the design elements of lines.	T-P	Development of a draft composition by using the design element of lines.
4	Form, meaning, function, In-Class Exercise-: Design a 2-D composition using the design element of shapes.	T-P	Development of a draft composition by using the design elements of shapes.
5	Form, meaning, function, In-Class Exercise-: Design a composition using the design	T-P	Development of a draft composition by using the design elements of points. Lines and shapes.

	element of points. Lines and shapes.		
6	Form, meaning, function, In-Class Exercise-: From 2D to 3D Translate 2D composition into 3D	T-P	Bring material for making physical model. Development of a 3D composition with given constraints.
7	Form, meaning, function, In-Class Exercise: presenting the 3D composition.	T-P	Development of a 3D composition with given constraints. Add texture and color to the composition
8	Purpose, Form and Meaning Midterm. 3D composition product: Stationary set.	P	Midterm review Evaluated the potential of 3D composition to be used for the main product.
9	Purpose, Form and Meaning PROJECT: Stationary set.	T-P	Research related topics and start preparing research boards and PowerPoint presentations.
10	Purpose, Form and Meaning PROJECT: Stationary set.	T-P	Bring a design proposal presentation board.
11	Purpose, Form and Meaning PROJECT: Stationary set.	T-P	Be ready to make sketches and work on design ideas.
12	Purpose, Form and Meaning PROJECT: Stationary set.	T-P	Be ready to make a low-fidelity prototype.
13	Purpose, Form and Meaning PROJECT: Stationary set.	T-P	Development of a draft design.
14	Purpose, Form and Meaning PROJECT: Stationary set.	T-P	Development of a draft design.
15	Final Review.	T-P	Preparation for final jury.
16	**FINAL EXAM**		

Required Course Material(s) / Reading(s)/ Text Book(s)	• Fiell, C., & Fiell, P. (2016). *Industrial design A–Z (2nd ed.).* TASCHEN. Call number:TS171 .F54 2000 • Gorman, C. (Ed.). (2003). *The industrial design reader*. Allworth Press. Call number: TS171 .4 .I53 2003 • Norman, D. A. (2005). *Emotional design: Why we love (or hate) everyday things. Basic Books*. Call number:BF531 .N67 2005 • Norman, D. A. (2013). *The design of everyday things: Revised and expanded edition. Basic Books.* Call number: TS171.4.N67 2013
Recommended Course Material(s)/ Reading(s) /Other	• Alexander, H. H. (1976). *Design: Criteria for decisions*. Macmillan. ISBN: 978-0023016608 • Baxter, M. R. (1995). *Product design: Practical methods for the systematic development of new products*. Chapman & Hall. ISBN: 978-0748741977 • Bhaskaran, L. (2005). *Design of the times: Using key movements and styles for contemporary design*. Van Nostrand Reinhold. ISBN: 978-0442258047 • Ertem, H. (2021). *Endüstriyel tasarım*. İstanbul Ticaret Odası. ISBN: 978-605-137-854-1 • Hudson, J. (2011). *Process: 50 product designs from concept to manufacture*. Laurence King Publishing. ISBN: 978-1856697255 • Jackson, P. (2011). *Folding techniques for designers: From sheet to form.* Laurence King Publishing. ISBN: 978-1856695299 • Lidwell, W., Holden, K., & Butler, J. (2010). *Universal principles of design, revised and updated: 125 ways to enhance usability, influence perception, increase appeal, make better design decisions, and teach through design*. Rockport Publishers. ISBN: 978-1592535873 • Mitani, J. (2016). *3D origami art.* CRC Press. ISBN: 978-1482248497 • Neat, D. (2013). *Model-making: Materials and methods*. Crowood. ISBN: 978-1847974840 • Pearce, C. (1991). *Twentieth century design classics*. Blossom. ISBN: 978-1872532323 • Reinertsen, D. G. (1997). *Managing the design factory: A product developer's guide to breakthrough success.* Free Press. ISBN: 978-0684839912 • Sexton, R. (1987). *American style. Chronicle Books. ISBN: 978-0877013924.* • *Taschen, B. (1994). Avantgarde design 1880–1930*. TASCHEN. ISBN: 978-3822889384 • Walker, S. (2017). *Design for life: Creating meaning in a distracted world. Routledge.* ISBN: 978-1138232464

ASSESSMENT		
Learning Activities	**NUMBER**	**WEIGHT in %**
Mid-Term	1	40
Quiz		
Assignment		
Project		
Field Study		
Presentation / Seminar		
Studio Practice		
Other		
Contribution of Final Examination/Final Project/ Dissertation to the Final Grade	1	60
TOTAL	2	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	Understand knowledge of industrial design principles, design methodologies, history, aesthetics, form & function and product development processes.			x		
2	Explain the properties of materials, manufacturing technologies, and production methods used in industrial product design			x		

3	Understand ergonomics, and user-centered design concepts in product development		x			
4	Understand sustainability principles, environmental impacts, and life-cycle considerations in industrial design			x		
5	Analyze design problems, user needs, and market requirements to develop appropriate product design solutions.		x			
6	Generate creative product concepts using sketching, ideation techniques, and visual exploration methods.				x	
7	Develop product designs using digital tools, 3D modeling, and rendering software			x		
8	Develop prototypes or models to evaluate product functionality, usability, and aesthetics.	x				
9	Communicate design ideas effectively through sketches, technical drawings, models, and professional presentations.	x				
10	Work effectively in multidisciplinary teams during product design and development processes.	x				
11	Manage design projects considering production constraints, market needs, and economic feasibility.	x				
12	Demonstrate professional responsibility, ethical awareness, and commitment to sustainable design practices.		x			

ECTS / STUDENT WORKLOAD				
ACTIVITIES	**NUMBER**	**UNIT**	**HOUR**	**TOTAL (WORKLOAD)**
Course Teaching Hour (X weeks * total course hours)	15	1	10	150
Preliminary Preparation and self- study	15	1	4	60
Mid-Term	1	1	5	5
Studio Practice				
Final Examination/ Final Project/ Dissertation	1	1	5	5

Other				
TOTAL WORKLOAD				220
TOTAL WORKLOAD / 25				8.8
ECTS				9

ETHICAL RULES WITH REGARD TO THE COURSE
Plagiarism Disclaimer Detected and undetected plagiarism is a serious offense at any time and it could have devastating effects on your degree result and future professional lives. Plagiarism is easy to avoid if you make sure to identify and acknowledge your sources thoroughly and do not copy directly from visual examples, designs, or notes that have in turn been taken word for word from your sources.

	SDG 1: No Poverty	
	SDG 2: Zero Hunger	
	SDG 3: Good Health and Well-Being	x
	SDG 4: Quality Education	x
	SDG 5: Gender Equality	
	SDG 6: Clean Water and Sanitation	
	SDG 7: Affordable and Clean Energy	
	SDG 8: Decent Work and Economic Growth	x
	SDG 9: Industry, Innovation and Infrastructure	x
	SDG 10: Reduced Inequalities	x
	SDG 11: Sustainable Cities and Communities	x
	SDG 12: Responsible Consumption and Production	x
	SDG 13: Climate Action	x
	SDG 14: Life Below Water	
	SDG 15: Life on Land	
	SDG 16: Peace, Justice and Strong Institutions	
	SDG 17: Partnership for the Goals	x

ASSESSMENT DETAILS AND EVALUATION CRITERIA:

Final grades will be determined based on the course learning activities and the assessment details for the final examination or project, as outlined below, in accordance with the University's Education and Examination Regulations.

Students are required to attend at least 70% of the classes. The maximum allowable absenteeism is 30%.

Midterm: 40%
Final: 60%

PREPARED BY	Asst. Prof. Dr. Saloumeh Khayyat Kahouei.
UPDATED	October 2025.
APPROVED	