General Information	Subject name, code and number of credits	**DSN 335 Product Design 3KU (6 ECTS)**
	Department	**Architecture and Design Department**
	Program (Bachelor's degree)	Bachelors
	Academic semester	Spring semester of the 2023/2024 academic year
	Subject teacher(s)	Leyla Huseynova PhD student
	E-mail:	leylahuseynova@khazar.org
	Telephone:	-
	Lecture room/Schedule	Khazar University, Neftchilar campus
	Counseling hours	At times agreed upon with students
Prerequisites	-	
Language of instruction	English	
Type of subject (compulsory, elective)	Compulsory	
Textbooks and additional literature	1. "The Design of Everyday Things" by Donald A. Norman (1988) 2. "Seductive Interaction Design: Creating Playful, Fun, and Effective User Experiences" by Stephen Anderson (2011) 3. "Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability" by Steve Krug (2014) 4. "Hooked: How to Build Habit-Forming Products" by Nir Eyal (2014) 5. "Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation" by Tim Brown (2009) 6. "Lean UX: Designing Great Products with Agile Teams" by Jeff Gothelf and Josh Seiden (2013) 7. "The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses" by Eric Ries (2011) 8. "Design Sprint: A Practical Guidebook for Building Great Digital Products" by Richard Banfield, C. Todd Lombardo, and Trace Wax (2015) 9. "The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail" by Clayton M. Christensen (1997) 10. "Creative Confidence: Unleashing the Creative Potential Within Us All" by Tom Kelley and David Kelley (2013)	
Course description	Product design courses are educational programs that focus on teaching students the principles, skills, and methodologies involved in designing products. These courses often cover a range of topics, including design thinking, user-centered design, prototyping, materials and manufacturing processes, and the use of design tools and software. There are various levels of product design courses, ranging from short-term workshops to undergraduate and graduate degree programs. The specific content and focus may vary depending on the institution and the level of the course. Popular areas of study include industrial design, product design, and interaction design.	
Course objectives	The course objectives for a product design program may vary depending on the specific focus and level of the course (e.g., undergraduate, graduate, or professional development). However, here are some common course objectives often associated with product design education: Developing Design Thinking Skills: Foster the ability to approach problems with a design thinking mindset, emphasizing empathy, creativity, ideation, and iterative prototyping.	

Results of teaching (learning).	The results of teaching product design are often multifaceted and can be observed in various aspects of a student's development and career outcomes. Here are some common results or outcomes associated with the teaching of product design: Developed Design Thinking Skills: Students should demonstrate an enhanced ability to approach problems with a design thinking mindset, emphasizing creativity, empathy, ideation, and prototyping. User-Centered Design Proficiency: Graduates should be skilled in conducting user research, understanding user needs, and incorporating user feedback into the design process. Technical Competence: Students should acquire proficiency in using design tools and software, such as CAD (Computer-Aided Design), to create 2D and 3D models, renderings, and prototypes. Effective Communication: Graduates should be able to communicate design ideas clearly and effectively through visual representations, presentations, and written documentation. Materials and Manufacturing Knowledge: Students should have a solid understanding of different materials, their properties, and various manufacturing processes, enabling informed design decisions. Prototyping and Iteration Skills: Graduates should be adept at creating physical and digital prototypes and demonstrate an understanding of the importance of iterative design processes. Problem-Solving Abilities: Students should exhibit strong critical thinking and problem-solving skills, applying analytical and creative approaches to address design challenges. Awareness of Ethical and Sustainable Design Practices: Graduates should be conscious of ethical considerations in design, including sustainability, social responsibility, and the impact of products on the environment. Real-World Applications: Exposure to real-world projects, case studies, or internships should provide students with practical experience and an understanding of the challenges and opportunities in the professional field. Career Readiness: The ultimate result is the preparation of students for successful entry into the workforce, equipped with the skills and knowledge needed for a career in product design. It's important to note that the outcomes may vary depending on the specific program, the commitment of students, and the evolving nature of the design industry. Many successful designers attribute their accomplishments to a combination of formal education, continuous learning, practical experience, and a passion for creativity and innovation.

Teaching methods	**Lecture**	+	
	Group discussion	+	
	Practical exercises	+	
	Analysis of a practical issue	+	

Assessment	**Components**	**Date/deadline**	**Components**
	Presentation (research)		15
	Attendance		5
	Activity		15
	Midterm exam		25
	Final exam		40
	Conclusion		100

Rules (Teaching policy and conduct	**Lecture, seminar, presentation** Students should carefully listen to the information given by the teacher and complete the project by doing their own research on the selected topic. During the construction phase

of the project, the teacher will give the necessary information to the student, and in addition, the student will prepare the project for presentation in line with his own design.

The plans of the project should be drawn in drawing programs, and the 3D lines of the project should also be drawn.

In the December exam, students must present the design phase and drawings of the project in detail.

A model of the project must be prepared and presented along with the presentation of the drawings in the final exam.

Each presentation will be evaluated as appropriate and given points.

Copying should not be used in the selection and construction of the project.

The model can be made as a prototype and from various materials, depending on the type of the project.

The length of the model should be at least 20 cm and at most 50 cm.

The model should be presented on a black plain A3 tablet, and the student's name, surname, course name and the year in which the model was made should be written at the bottom of the tablet during the presentation.

Exception: If the student informed the dean of the faculty in advance that he/she will not be able to participate in the handover phase of the work due to valid reasons (related to family situation and health), or if he/she has submitted any related document (application or reference), only in this case the student will be able to attend after the deadline. can hand over the work.

Attendance:
The maximum score for class attendance is 5 points. The number of points is based on: if the student attends all classes in the subject during the semester, he is given 5 points. If the total number of lessons missed during the semester for the subject exceeds the prescribed limit of 25% (illness, family situation, etc.), the student is not admitted to the exam session and a certain decision is made about him.

Exams:
The mid-term exam will be held on subjects taught in March or April (after the project is handed over), and the final exam will be held on subjects taught in May or June (after the project is handed over).

The procedure for completing the subject.
The student's knowledge is evaluated with a maximum of 100 points. An overall success rate of 60% and above is considered to complete the course. A student with a deficit can take this subject again in the next semester or the next year.

Rules of conduct of the student.
A student is not allowed to violate the University's internal disciplinary rules and use a mobile phone. It is forbidden to violate the educational process and ethical rules during the lesson. Unauthorized discussions between students are also prohibited during class.

Table (subject to change)

Week	Date	Topics of the subject	Tutorial/Assignments
1.	12.02.2024	Introduction to Product Design	Product design is the process of creating and developing new products with a focus on functionality, aesthetics, and user experience.
2.	19.02	Importance of User-Centered Design	Emphasize the significance of understanding user needs and preferences to create products that meet or exceed customer expectations.
3.	26.02	Design Thinking Approach.	Introduce the design thinking methodology, involving empathizing with users, defining problems, ideating solutions, prototyping, and testing.
4.	04.03	The Design Brief.	Explain the role of a design brief in guiding the design process, detailing project requirements, constraints, and objectives.
5.	11.03	Research and Analysis.	Discuss the importance of thorough research, market analysis, and competitor studies to inform the design process and identify opportunities.
6.	18.03	Concept Generation.	Explore techniques for brainstorming and generating creative design concepts, encouraging students to think divergently.
7.	25.03	Sketching and Rendering.	Highlight the importance of sketching and rendering skills in visualizing design ideas and communicating them effectively to stakeholders.
8.	01.04	Prototyping and Model Making. Materials and Manufacturing Processes.	Emphasize the iterative nature of prototyping and model making to refine and test design concepts before finalizing a product. Provide an overview of various materials and manufacturing processes, and their impact on design decisions, cost, and sustainability.
9.		**Midterm exam**	
10.	08.04	Ergonomics and Human Factors.	Discuss the principles of ergonomics and human factors in product design, ensuring products are comfortable and user-

			friendly.
11.	15.04	Sustainable Design.	Highlight the importance of integrating sustainable practices into product design, considering environmental impact and lifecycle assessments.
12.	22.04	Design for Accessibility.	Discuss the principles of inclusive design, emphasizing the importance of creating products that are accessible to people of all abilities.
13.	29.04	Branding and Packaging.	Introduce the role of branding and packaging in product design, as they contribute to the overall perception and success of a product in the market.
14.	06.05	Design Communication.	Explore effective ways to communicate design ideas, including the use of 2D and 3D software, presentations, and design documentation.
15.	13.05	Design Ethics.	Discuss the ethical considerations in product design, including issues related to user privacy, safety, and the social impact of products on communities. Completing the product design and preparing it for presentation
Final exam			

Təsdiq edir: Dos. Abbasova Ş.A._____

Memarlıq və dizayn departamentinin rəhbəri