

<b>General Information</b>	Subject name, code and number of credits	<b>DSN 417 Ergonomics, 6 ECTS</b>
	Department	<b>Architecture and design department</b>
	Program (Bachelor's degree)	Bachelors
	Academic semester	Fall semester of the 2023/2024 academic year
	Subject teacher(s)	Leyla Huseynova PhD student
	E-mail:	<a href="mailto:leylahuseynova@khazar.org">leylahuseynova@khazar.org</a> <a href="mailto:leila.huseynova.00@gmail.com">leila.huseynova.00@gmail.com</a>
	Telephone:	
	Lecture room/Schedule	Neftchilar campus, Wednesday 11:50 a.m.-01:20 p.m., 01:40-03:10 p.m.
	Counseling hours	At times agreed upon with students
<b>Prerequisites</b>	-	
<b>Language of instruction</b>	English	
<b>Type of subject (compulsory, elective)</b>	Selection	
<b>Textbooks and additional literature</b>	<ol style="list-style-type: none"> <li>1. Teaching of ergonomics in the design environment V.F. Runge, Y.P. Manusevich. Moscow. "Architecture - S". 2008</li> <li>2. Ergonomics and Labor Processes, Z.A. Malayev, Azerbaijan State University of Economics, Ministry of Education of the Republic of Azerbaijan. Baku-2018.</li> <li>3. Advances in Ergonomics In Design, Usability &amp; Special Populations Part II. 20014.</li> <li>4. Ergonomics and Design A Reference Guide. 2006 Allsteel Inc.</li> </ol>	
<b>Course description</b>	<p>"Ergonomics" is a scientific discipline that studies the functional capabilities of a person in the work and household processes, and distinguishes the requirements for creating optimal conditions for useful life activity and highly productive work.</p> <p>This subject is designed to familiarize students with the essence, purpose and tasks of the science of ergonomics, the essence of an activity that studies the human factor.</p> <p>The basic function of ergonomics is to increase performance by improving employee health and occupational safety by ensuring that the work organization is arranged in accordance with the physical and psychological</p>	

	<p>characteristics of people so that people can work efficiently, healthily and safely in the workplace.</p> <p>The aim of ergonomics is to improve the design of products, systems and environments in order to optimize their safety, efficiency and usability for humans. Ergonomics aims to ensure that tools, equipment and environments are designed to suit the needs and abilities of the people who will use them.</p>
<b>Course objectives</b>	<p><b>Purpose of the subject:</b></p> <p>The specificity of the subject of ergonomics taught for designer, the shape, the skin of biofunctional moments that penetrate the harmony of the designer. Special attention is paid to the biological field of ergonomics from an anatomical, physiological, psychological and environmental point of view. Ergonomics is a complex of functional and aesthetic perception in scales. Ergonomic design focuses on creating comfortable, efficient and safe work environments and equipment for employees to use.</p> <p>In general, the health and safety of ergonomics aims to create a working environment that supports the physical and mental well-being of employees, reduces the risk of injury and disease, increases productivity and work quality, and supports job satisfaction and overall organizational performance.</p>
<b>Results of teaching (learning).</b>	<p>In the process of general teaching of the subject, students:</p> <p><b>they should know:</b></p> <ul style="list-style-type: none"> <li>• Perception of the methodological basis of ergonomics;</li> <li>• Assimilation of general information on ergonomic design;</li> <li>• “Perception of human-machine-muhit” connection;</li> <li>• Interactions with external and internal connections in the system “ human-machine-environment ”;</li> <li>• To perform ergonomic analysis;</li> <li>• Ergonomic normative rules;</li> <li>• Use of ergonomic norms in the field of design and architecture;</li> </ul> <p><b>they should be able to:</b></p> <ul style="list-style-type: none"> <li>• Understand the ergonomic security of design and architecture projects, the factors that combine ergonomics and design, and the development of joint activities;</li> <li>• The concept of the work environment, works, their classification and the interaction of elements, as well as the structure of the object and the shape and structure of the object, understand the method of determining the ratio of static and dynamic dimensions of the human figure and technical device;</li> </ul> <p>They should also be able to analyze the organization of the work environment, including data reflection tools, visual information systems, light-color solution at production facilities, environmental factors;</p>
<b>Lecture</b>	<b>+</b>

<b>Teaching methods</b>	<b>Group discussion</b>		+
	<b>Practical exercises</b>		+
	<b>Analysis of a practical issue</b>		+
<b>Assessment</b>	<b>Components</b>	<b>Date/deadline</b>	<b>Components</b>
	<b>Attendance</b>		5
	<b>Assignment</b>		20
	<b>Midterm exam</b>		30
	<b>Final exam</b>		45
	<b>Final</b>		100
<b>Rules (Teaching policy and conduct)</b>		<b>Lecture, seminar, presentation</b>	
		<p>Lecture. A lecture is given to the students about the topic.</p> <p>Group discussion. In order for students to better understand and remember the topics covered, discussions are held regularly.</p> <p>Practical exercise.s Practical tasks are given to understand the studied topic</p> <p>Analysis of a practical issue. Periodic question-and-answer, quick-to-solve small-scale task-based discussions are held to understand how well students have mastered the topics in theory and at what level they can practically complete the given task by thinking like a designer.</p> <p>Lectures on Ergonomics will be read by the subject teacher. In seminar-training classes, the student prepares for the topics, must be able to express and explain their views in a logical sequence, as well as to substantiate them with arguments. Based on the topic given to students, they should prepare a presentation using free research skills and present it during the agreed lesson. To achieve this, the student:</p> <ol style="list-style-type: none"> <li>1) Carefully read the questions discussed on each topic of the workshop session;</li> <li>2) Carefully study relevant lecture materials;</li> <li>3) Read and study the recommended literature on the topic;</li> <li>4) Prepare a brief speech on each question discussed at the workshop session;</li> <li>5) Must acquire knowledge and skills by performing tasks and issues on the topic</li> </ol> <p>Students will present their individual projects at the end of the course.</p> <p><b>It will be evaluated in the midterm (30 points) and final (45 points) exam.</b></p> <p><b>The project must be submitted by the student. The purpose of this assignment is to teach future designers the skills of presenting, doing a little research in a short period of time, and designing.</b></p> <p><b>The presentation must be submitted during the months of September and October before the midterm exam. No additional time is allowed to submit after the last week of classes.</b></p> <p><b>Note:</b> In accordance with the purpose of the subject, the projects must be prepared individually by the student in a graphic design program, without plagiarism.</p>	

**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 September and October (after the project is handed over), and the final exam will be held on subjects taught in November and December (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**

<b>Week</b>	<b>Date</b>	<b>Topics of the subject</b>	<b>Tutorial/Assignments</b>
1	20.09.2023	Basics of ergonomics.	Presentation №1
2	27.09.2023	Incense stages of ecognomics. Excerpt from the field. The effect is the study of the region.	Presentation №2
3	04.10.2023	Excerpts of ergomics. Amiles who set ergonomic requirements. Issues that ensure the coagulation of the insect in the mammary environment. Lightning-complex as the object of the ergonomic analiz. Technician Lightning. Ring shades and insect yard activity in a mega-environment. The effect of race and light on the gavrasm of	Presentation №3

		Mecca volumes.	
4	11.10.2023	Expropriation requirements.	Presentation №4
5	18.10.2023	Ergonomic reports of workplace parameters. The report of workplace parameters and their calculation bases. Workplace parameters and equipment. Methods of ergonomic studies.	Presentation №5
6	25.10.2023	Ergonomics and supply of different types of environments.	Presentation №6 Repetition and discussion of topics.
7	01.11.2023	<b>Midterm exam</b>	
8	08.11.2023	Tasks of ergodesign in environmental design. Ergonomic program of living environment design. The main equipment elements that ensure the completeness of the environment. Ergonomic requirements for furniture. Habitat equipment. The object complex of the living environment. Ergonomic assessment of kitchen equipment. Bathroom equipment. Designing the environment for the child.	Presentation №7-8
9	15.11.2023	Furnishing of interiors of public buildings. Organization of the workplace and arrangement of furniture in the office. Equipping school and pre-school institutions with equipment. Supply of healthcare institutions.	Presentation №9
10	22.11.2023	Ergonomics of the living environment of the elderly and disabled. Ability to work. Types and causes of disability. Ergonomics requirements for the urban environment, taking into account the needs of the elderly and the disabled. Organization of a comfortable environment for disabled children.	Presentation №10
11	29.11.2023	Ergonomic aspects of environment design and perception. Visual environment and vision physiology.	Presentation №11
12	06.12.2023	Ergonomics of perception of environmental objects and systems. Interaction of perception and information.	Presentation №12

		The role of "gestalts" in perception processes. Perspective "stereotypes" Visual distortions	
13	13.12.2023	The importance of cognitive psychology for ergonomic design of the environment. Formation of architectural prototypes as a means of environment recognition. Image perception problem in architecture.	Presentation №13
14	20.12.2023	Ergonomics and educational system environment design.	Presentation №14
15	27.12.2023	Differentiation of conditions in the environmental system from the perspective of ergonomic design approach.	Presentation №15 Repetition and discussion of topics.
<b>Final exam</b>			

**Təsdiq edir:** Dos. Abbasova Ş.A.  
Memarlıq və dizayn departamentinin rəhbəri