| Course title | Dendrology in Landscape Architecture (ECTS 6) |
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| **Subject/module code** | LAD 2404 |
| Semesters in which the course is taught | Semesters 4/8 |
| Assigned instructor | Xalikov Sanjar Ravshanovich, assistant lecturer |
| Language of instruction | Uzbek |
| Course type | Compulsory |
| Study hours (including independent study) | **Total hours – 120.**<br>**Classroom hours – 72.**<br>Lecture hours – 0<br>Laboratory hours – 0<br>Practical hours – 72<br>**Independent study – 108 hours** |
| ECTS | 6 |
| Aims and objectives of the course / learning outcomes | **Aim of the course** – students are taught creative thinking in the course "Dendrology in Landscape Architecture" and its tools, as well as how to use them. The aim of this course is to develop in students the skills of finding creative solutions and developing strategies to overcome problems that may positively affect the work process and leadership ability. Understanding the content of the course is important for aspects such as improving students' capacity for independent thinking, assessing creative and critical thinking abilities, and methods of studying thinking processes.<br>The aim of teaching the course is to develop in students knowledge, skills and competence regarding architectural and graphic means, the methods of executing them and their types; to apply "Dendrology in Landscape Architecture", and to acquire professional and personal skills in working with various means of depiction;<br><br>To teach students architectural and graphic visual materials,<br>and to master artistic depictions and acquire the ability to use them.<br>**Objective of the course** – to study the theoretical and practical aspects of creative thinking, and to develop in students the skills needed for creative thinking, imagination and the use of abstraction. Particular attention is paid to the fact that these concepts combine the most suitable features for use, applicable to all professions and to different people.<br>**Learning outcomes:**<br>1. To have an understanding of the functional purpose of dendrology objects in landscape architecture and of practical architectural-sociological scientific research;<br>2. To divide dendrology in landscape architecture into several types depending on the objects; social structure and process;<br>3. The types of dendrology in landscape architecture and the social requirements for forming it;<br>4. To know the basic concepts and principles of designing dendrology in landscape architecture and to have the skills to apply them;<br>5. To have the skills to apply methods of analyzing the design processes of dendrology in landscape architecture and to make decisions on its problems. |
| Course content (topics) | **I. Main theoretical part (lectures)**<br>Lectures are not provided for in the model curriculum of the course.<br><br>**II. Instructions and recommendations on organizing laboratory classes.**<br>Laboratory classes are not provided for in the model curriculum of the |

course.

**III. Instructions and recommendations for practical classes**

The instructor's preparation for a practical class begins with studying the initial documents (curriculum, thematic plan, etc.) and ends with drawing up the lesson plan. The instructor must have a clear idea of the aims and objectives of the practical class and of the amount of work each student must complete.

The methodological instructions are the instructor's main methodological document for preparing and conducting practical classes.

The aim of a practical class is to understand theory and acquire skills. It consists in developing the ability to apply them consciously in academic and professional activity and to formulate one's own point of view convincingly.

**Recommended practical topics:**

1. Introduction. Object design processes: the meaning of design activity; familiarization with the project program. Setting the assignment on the topic of creating the project "Landscaping and greening of the central streets of the city with tree and shrub plants". Holding a scientific-analytical discussion; familiarization with literature and methodological works.
2. Identifying woody plants in urban and park conditions, aimed at their use and planting.
3. Analyzing potential planting sites by students through understanding the environmental constraints on plant growth.
4. Systematics of tree and shrub plants. The concept of dendroflora and binomial nomenclature.
5. Morphology of the vegetative organs of trees. Structure and vital functions of the shoot, leaf and root.
6. Morphology of the generative organs of trees. Structure and vital functions of the flower, fruit and seeds.
7. Biomorphological features of trees and shrubs; patterns of growth and development.
8. Patterns of geographic distribution of trees; introduction and acclimatization features
9. The main ecological factors and their influence on representatives of dendroflora
10. Completing the first clausura on the topic in A3 format.
11. Analysis of the first clausura; methodological analysis of project elements, norms and object designs. Working on the sketch idea on the topic.
12. Developing sketch variants. Taking functional processes into account in the sketch idea. Preparing for the final clausura.
13. Analyzing the sketch. Methodological implementation of the sketch idea. Forming the concept of the idea. Completing the final clausura in A3 format.
14. Using green spaces in accordance with the principles of landscape and architectural solutions.
15. Initial analysis of the primary creative assignment. Finishing the development of the project idea; executing the project with a scaled layout.
16. Turning unused leftover sites into parks, bicycle paths or gathering places.
17. Drawing the project drawings, arranging them on the board.
18. Placing dimensions within the project and writing legends. Developing the entourage in elevation and perspective views.
19. Comparing the project on artistic-figurative and economic grounds and on the basis of effectiveness. Considering the accepted variant from

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| | an analytical-synthetic point of view.<br>20. Developing the graphic details.<br>21. Executing and completing the graphic modeling; submitting the project. Project discussion.<br>**IV. Independent study and independent work.**<br>The independent study competence helps students develop independently and improve the effectiveness of their professional activity. Students carry out independent work on their own mobile devices, under the instructor's guidance, in traditional or electronic form.<br>**Recommended topics for independent study:**<br>**1.** Landscape architecture structures and design.<br>**2.** Structural elements of landscape architecture.<br>**3.** Division of territories according to the urban structure.<br>**4.** Stages of designing landscape architecture objects.<br>**5.** Vertical planning of the terrain relief and determining the volume of earthworks.<br>**6.** What the aims and objectives of engineering works on landscape architecture objects consist of.<br>**7.** What the tasks and types of paving and level areas consist of.<br>**8.** Analyzing paving groups and their place in landscape architecture.<br>**9.** Types of roads and paths and the norms for designing them.<br>**10.** Retaining walls, steps, ramps and slopes, and their natural, socio-political, historical-cultural and material-technical formation.<br>**11.** Dendrology in landscape architecture and its modern compositional solutions, as well as design rules and norms.<br>**12.** The concept of the types and purposes of hydraulic structures and the aim of their application.<br>**13.** Architectural landscape solutions and types of shores and embankments.<br>**14.** Architectural compositional solutions for long shores and embankments.<br>**15.** Construction materials and architectural-construction solutions for shores and embankments.<br>**16.** Drawing up a concept for a garden-park composition.<br>**17.** The composition of trees and shrubs.<br>**18.** Flower vases, their forms and construction materials.<br>**19.** The origin of fences, gates and decorative walls.<br>**20.** Dimensions and construction materials used in lighting fixtures.<br>**21.** Historical conditions of development of the structures used for plants.<br>**22.** Landscape solutions and types for storing, tending, watering and repairing plants.<br>**23.** Transportation and storage of plants.<br>**24.** The functions of hedges, borders, bosquets and arboreta.<br>**25.** Types of fountains and the variety of water jets.<br>**26.** Levels of landscape organization in territories.<br>**27.** Types of small architectural forms.<br>**28.** Organizing landscape elements in the open squares of the city center.<br>**29.** By what features do representatives of the mulberry and hackberry families differ from one another?<br>**30.** By what biological and ecological features do representatives of the elm family differ from one another? |
| Student assessment | The assessment of students' knowledge is based on indicators of how well they have mastered the course material during the semester and the final assessment (results of tests, assignments, and written and oral work). |

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| | During the course Analysis of Building Structure, students are assessed on a 100-point scale. Of these, 50 points are allocated to the results of ongoing and midterm assessment (of the 50 points, 60% is ongoing assessment and independent study, and 40% is midterm assessment), and 50 points to the result of the final assessment. Students whose total result for ongoing and midterm points is below 30 are not admitted to the final assessment exam. A student who scores 30 or more points in the final assessment is considered to have mastered the course. |
| Exam requirements | The student must have fully mastered the theoretical and practical concepts on the subject and be able to reflect the results of analysis correctly. The student must have completed the assignments given in the ongoing and midterm forms of assessment, as well as the independent work. In addition, within the set time the student must have obtained the required points in the ongoing, midterm, independent study and final assessments for the relevant course.<br>A student who has not submitted the ongoing assessment, midterm assessment and independent study assignments, or who has scored fewer than 30 points in these assignments and types of assessment, is not admitted to the final assessment.<br>In addition, a student who has missed 25% or more of the classroom hours allocated to the course without a valid reason is removed from the course, is not admitted to the final exam, and is considered not to have earned the corresponding credits for the course.<br>A student who fails the final exam or scores in the range "0–29.9" in these types of exams is considered to have an academic debt. |
| Recommended literature | **Main literature:**<br>1. "Dendrology": textbook. A.K. Qayimov, E.T. Berdiev, H.F. Hamroev, S.A. Turdiev. "Fan va texnologiya", Tashkent, 2015.<br>2. "Dendrology". A. Qayimov. Study guide, Tashkent, 2017.<br>**Additional literature**<br>4. Landscape Architecture Structures and Design. A. Uralov, I. Mahmatqulov. Study guide. Samarkand, 2019. 136 pp.<br>5. "Urban Planning and Landscape Architecture". D.U. Isamukhamedov, M.K. Akhmedov, K.D. Sattarova. Study guide. Tashkent, 2019. Pp. 178–200.<br>6. Fundamentals of Architectural Design. A. Uralov, Kh. Pulatov, M. Miryusupova, M. Zoirova, O. Salimov, Sh. Nurmukhammedova, D. Alimova, A. Turdiev, Sh. Reyimbaev. Textbook. Tashkent, 2010. 201 pp.<br>**Internet resources**<br>6. www.landshft.ru<br>7. www.gardenr.ru<br>8. www.land-desingn.ru<br>9. www.membrana.ru<br>10. http://www.arhitekto.ru<br>11.https://classes.cornell.edu/browse/roster/FA26/class/LA/4910?utm_source=chatgpt.com |