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TEACHING METHODS IN INTEGRATING TOPOGRAPHIC DRAWING AND LANDSCAPE DESIGN

Abstract: This article discusses, albeit in part, improving teaching by integrating the sciences of topographic drawing and landscape design into the engineering graphics and design sciences cycle. Common surfaces of the second order are widely used in the practice of engineering graphics and design sciences. Therefore, the graphical convenience of these surfaces is studied in descriptive geometry and topographic drawing, as well as in the design of shafts. Cross-sections and geometric properties of general second-order surfaces have been studied more than other complex surfaces. Because the formation of these surfaces is based on a certain mathematical law.

Key words: topographic drawing, landscape design, engineering graphics, projection, interior design, education, topics, Suviner, perspective.

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Introduction

The science of engineering graphics is all-encompassing, it enhances human thinking and spatial imagination. The science of engineering graphics is also distinguished by its complexity and interestingness compared to other disciplines. Therefore, it is no coincidence that a number of disciplines relate to engineering graphics. In higher educational institutions, academic lyceums and professional colleges of the system of higher and secondary specialized education of the Republic of Uzbekistan, fine arts and engineering graphics are used as a creative exam for entrance examinations in design.

But while the sciences in the graphics cycle and the sciences in the design cycle are inextricably linked, engineering graphics is often poorly taught in design curricula.

The lack of interdisciplinary communication between the studied general graphic art, special engineering graphics and design sciences negatively affects the quality of training students in the specialty of engineering graphics. Therefore, to eliminate the contradiction revealed during the experiment, we developed the following:

- test tasks that allow them to be ready to apply their knowledge in the field of design and engineering graphics in the design process;

- a system of practical exercises, including creative tasks, exercises, graphic works, using the interdisciplinary relations presented in the table.

It is noteworthy that when the connection between these two sciences is emphasized, their basis is primarily the diagram. Descriptive geometry often uses kinematic surface shaping. The appearance of kinematic surfaces depends on the shape of their creator and the law of motion in space. For example, on linear surfaces, the shape of the constructor is rectilinear, and the law of its motion in space is determined by the guiding surface.

On rotating surfaces, the shape of the creator is an arbitrary line, and the law of formation is that it rotates around a certain axis. On helical surfaces, the manufacturer's shape is straight or curved, and the law of formation is helical (rotational and translational) motion. Some surfaces cannot be defined by precise geometric laws. Such surfaces are defined by several points or lines lying on this surface.

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In our time, landscape design is very developed. Landscaping is based on the science of topographic drawing and the science of engineering graphics.



1 landscape design photo

Introductory lectures, in which the problem of preparing students for the study of a new topic from landscape design is solved. These classes develop the deductive thinking of students in the disciplines of engineering graphics, making connections between past and new topics;

Problematic lectures, lectures on topographic drawing and landscape design include unresolved issues of educational material for students, the teacher interprets the topic as a scientific problem, not only facts are stated, but areas of its practical significance are highlighted.

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2 photos of the drawing of landscape design

Planned errors are given to students from lectures on topographic drawing and landscape design with errors and omissions in preliminary demo drawings. Finding and analyzing drawings that match the design, activate the creative thinking of students, increase their attention and arouse interest in solving an existing problem.

Discussion at lectures on landscape design, a dialogue is established between the student and the

teacher, who in the learning process share their views with each other;

Generalizing lectures, allowing students to systematize their knowledge of the content of the disciplines of topographic drawing and landscape design, are held at the end of large sections or at the end of the course.

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