

BASICS OF COMPUTER GRAPHICS

(name of the course)

OUTLINE

TO THE SYLLABUS OF THE INSTITUTION OF HIGHER EDUCATION

Specialty 6-05-0612-03 Information management systems

Profiling Automated information processing systems

	Form of higher education		
	Full-time (full-time)	Correspondence	Part-time
Course	2	3	2
Semester	4	6	4
Lectures, hours	16	4	4
Laboratory hours	16	4	4
Test, semester	4	6	4
Classroom hours in the educational discipline	32	8	8
Independent work, hours	76	100	100
Total hours of the discipline credit units	108/3		

1. Summary of the contents of the study discipline

The purpose of the discipline is to form specialists who can reasonably and effectively apply existing and master new algorithms of computer graphics, graphics applications, tools for writing applications, standards in the development of graphics systems.

2. As a result of mastering the study discipline, the student should

know:

- problems of geometric modeling;
- types of geometric models and their properties;
- parameterization of models; geometric operations over models;
- algorithms of visualization: cutting off, reaming, removal of invisible lines and surfaces, painting;
- ways of creating photorealistic images;
- basic functionality of modern graphics systems, organization of dialogue in graphics systems; classification and overview of modern graphics systems.

be able to:

- work with software tools that provide hardware implementation of graphic functions, input and output of graphic information; conversion: coordinate system of graphic information, formats for storing graphic information;
- to realize the construction of "open" graphic systems; 2D and 3D modeling.

has a skill:

- skills in developing graphics applications.

3. Formable competencies

Obtain, store and process graphic information using computer graphics software with a focus on modern information technology.

4. Requirements and forms of current and intermediate attestation.

Defence of laboratory works - current, credit – intermediate, oral -written