FINISHING AND STRENGTHENING SURFACE TREATMENT

(course title)

COURSE SYLLABUS ABSTRACT

Speciality: 1-36 01 04 «Equipment and technologies for highly efficient material processing processes»,

	STUDY MODE
	full-time
Year	3
Semester	6
Lectures, hours	34
Laboratory classes, hours	16
Pass/fail, semester	6
Contact hours	50
Independent study, hours	58
Total course duration in hours / credit units	108/3

1. Course outline.

The purpose of the discipline is the acquisition by students of a complex of special knowledge and skills in the field of various types of finishing and hardening processing, used technological equipment and equipment.

2. Course learning outcomes.

As a result of mastering the academic discipline, the student should

know:

- technical capabilities of various types of finishing and hardening treatment;
- the physical essence of the finishing and hardening treatment;
- tools, equipment and equipment used for finishing and hardening processing;
- operational properties of the surfaces of parts treated with finishing and hardening treatment;

be able to:

- choose the types of finishing and hardening treatment of the surface of the workpiece, providing the required quality and efficiency of the processing process;
- to determine the optimal parameters of finishing and hardening treatment;

possess:

- methodology for choosing the type of finishing and hardening treatment for the workpiece surface, taking into account the requirements of the drawing and type of production;
- information on modern types of finishing and hardening treatment and prospects for their development;
- skills in the choice of equipment, tooling, automation and mechanization in the design of finishing and hardening processing technology.

3. Competencies.

Mastering this academic discipline should ensure the formation of the following competencies:

СК-3: Know the basic processes of material processing and assembly of machines, methods of calculation and selection of a processing tool.

4. Requirements and forms of midcourse evaluation and summative assessment.

To assess the level of knowledge of students, the following diagnostic tools are used: oral survey during laboratory work; reports on completed laboratory work with their oral defense; submission of an account.