MATERIALS SCIENCE
(name of the discipline)

ANNOTATION
TO THE CURRICULUM OF A HIGHER EDUCATION INSTITUTION

Specialty: 1-36 01 06 – Equipment and technology of welding production

	Form of higher education		
	Full-time (day)	Correspondence (full)	Correspondence (abbreviated)
Course	2	3	2
Term	4	5	4
Lectures, hours	34	6	8
Laboratory classes, hours	34	6	8
Classroom control work (semester, hours)		5 (2 hours)	4 (2 hours)
Exam, semester	4	5	4
Classroom hours for the academic discipline	68	14	18
Independent work, hours	40	94	90
Total hours of academic discipline / credits	108/3,0		

1. Summary of the discipline:

The purpose of the discipline is to assimilate students' knowledge about the structure and properties of metals, alloys and other structural materials.

2. Learning outcomes:

To know the basics of the theory and practice of thermal, chemical-thermal, thermomechanical processing of metal materials; practical ways to study the structure, properties of materials and their heat treatment; modern materials and effective methods of their heat-hardening treatment.

Be able to correctly determine the application areas of a particular material; assign methods and modes of structure-changing processing.

Possess methods of studying the structure and properties of materials; methods of determining the structure and properties of materials; practice of using various materials.

3. Formed competencies:

SK-2: To know the basic properties, structure, marking and methods of hardening of ferrous and non-ferrous metals and alloys.

4. Requirements and forms of current and interim certification.

Evaluation tools used: test tasks for the protection of laboratory and practical work, test tasks for the exam

The following forms are used to diagnose competencies:

- oral; written

To assess the level of knowledge of students, the following diagnostic tools are used:

- interview; tests; written reports on laboratory work; defense of laboratory work; passing the exam.