

CHEMISTRY

(course title)

COURSE SYLLABUS ABSTRACT

1-36 11 01 Innovative equipment for the construction industry (according to directions)

1-36 11 01-01 01 Innovative technology for the construction and operation of highways

	Form of higher education
	Ochnaya
Year	1
Semester	2
Lectures, hours	34
Practical classes (seminars), hours	16
Laboratory classes, hours	16
In-class test (semester, hours)	2
Course paper, semester	66
Course project, semester	84
Pass/fail, semester	150/6

1. Course outline

The discipline belongs to the research module (a component of the institution of higher education). The list of academic disciplines (cycles of disciplines) that will be based on this discipline:

- materials science and technology of structural materials

2. Course learning outcomes

Upon completion of the course, students will be expected to know:

- the basic concepts and laws of chemistry;
- basic patterns of chemical reactions; basic electrochemical processes, the phenomenon of metal corrosion, the process and laws of electrolysis;
- the latest achievements in the field of chemistry and prospects for their use.

be able to:

- formulate and apply the basic laws, principles and concepts of chemistry in accordance with the program;

possess:

- have the skills to perform basic chemical laboratory operations

3. Competencies

Apply knowledge of natural science disciplines for experimental and theoretical study, analysis and solution of applied and engineering problems

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 and written questioning during practical classes;
- carrying out control works (test tasks) on separate topics, protection of laboratory works.