Philosophy and methodology of science

COURSE SYLLABUS ABSTRACT

7-07-0732-01 Construction of buildings and structures
Profiling Industrial and civil construction
Profiling Motor roads

Advanced higher education

	Form of higher education (full-time)	Form of higher education (correspondence, abbreviated)	) Form of higher education (correspondence, full)
Course	4	4	5
Semester	8	8	10
Lectures	40	6	6
Practical (seminar) classes	32	4	4
Classroom hours per academic discipline	72	10	10
Independent work, hours	52	114	114
Exam, semester	8	8	10
Total hours per academic discipline/credit units	124/3	124/3	124/3

1. Course outline

This minimum curriculum is intended for students mastering the content of the educational program of higher education of the second stage, which develops knowledge, skills and abilities in scientific, pedagogical and research work and ensures obtaining a master's degree; for applicants mastering the content of a postgraduate educational program that provides the scientific qualification “Researcher”; for persons enrolled in studies at the first stage of postgraduate education in the form of competition for passing candidate exams in general education disciplines.

The general education discipline “Philosophy and Methodology of Science” involves a conceptual understanding of modern world processes and is designed to help scientists determine their social and civic positions, to realize that today science places increased demands on the personal qualities, worldview and value systems of scientists

2. Course learning outcomes

Upon completion of the course students will be expected to

know:

- philosophical and ideological problems in the context of the values of modern civilization;
- conceptual models of philosophical and methodological analysis of science; philosophical and methodological problems of disciplinary organized science;
- conceptual content and methodology of interdisciplinary and transdisciplinary areas of modern science;

- a complex of systemic methods and philosophical and methodological principles of modern scientific research and the content of the specifics of their application in professional activities;
- the content of the conceptual apparatus and methodology from the field of theory and practice of argumentation.

be able to:

- analyze and evaluate the content and level of philosophical and methodological problems when solving social and professional problems;
- use knowledge about the development of modern philosophical trends in professional research and teaching activities;
- conduct a critical analysis, generalization and systematization of scientific information, setting research goals and choosing the optimal ways and methods to achieve them;
- develop new research methods in relation to the scientific, scientific-production and pedagogical profile of activity;
- conduct scientific research in compliance with the principles of academic ethics, recognition of personal responsibility for the goals, means, and results of scientific work;
- demonstrate the ability for creativity and scientific research in the context of an interdisciplinary approach to solving practice-oriented and fundamental scientific problems

to possess a skill:

- mastery of the terminological apparatus of science;
- methods and techniques of logical analysis;
- culture of scientific thinking and speaking skills in front of an audience;
- basic traditional and modern methods of cognition.

3.Competencies

Names of formed competencies
Apply methods of scientific knowledge in research activities, generate and implement innovative ideas

4. Requirements and forms of midcourse evaluation and summative assessment

Intermediate certification - exam, oral form

Current certification - oral survey