METHODOLOGY AND METHODS OF SCIENTIFIC RESEARCH

COURSE SYLLABUS ABSTRACT

Specialty 7-06-0732-01 Construction
Concentration Transport construction

	STUDY MODE
	full-time
Year	1
Semester	1
Lectures, hours	16
Laboratory classes, hours	16
Exam, semester	1
Contact hours	32
Independent study, hours	184
Total course duration in hours / credit units	216/6

1. Course outline
The purpose of the academic discipline is for undergraduates to master the basic principles and knowledge of scientific research methodology
2. Course learning outcomes
Upon completion of the course, students will be expected to
know: – forms and methods of scientific knowledge, development of science and changing types of scientific rationality; – basic concepts of scientific research and their methodologies; – stages of scientific research; – methods of rational planning of experimental research; – have an idea about the features of scientific knowledge, its levels and forms; – rules for preparing scientific and technical reports, dissertations, and articles.
be able to: – select and implement methods of conducting scientific research, analyze and summarize research results, bring them to practical implementation; – formulate the purpose and statement of the research problem; – select and implement methods for conducting scientific research in the field of construction; – analyze and summarize research results, bring them to practical implementation; – work with scientific and technical information, carry out patent searches, – rationally plan experimental research,
to possess a skill: - methods of conducting and rational planning of scientific research in the field of construction; – skills in working with scientific and technical information; – skills in presenting the results of scientific research; – methods for processing the results of scientific experiments; – skills in formalizing the results of research work, presenting and reporting the results of scientific research on the topic of the master's thesis
3. Competencies
UK-1 Apply methods of scientific knowledge in research activities, generate and implement innovative ideas.
UK-2 Solve research and innovation problems based on the use of information and communication technologies.
4. Requirements and forms of midcourse evaluation and summative assessment
Current certification: – protection of laboratory work.
Intermediate certification: – exam.