Level: PhD

Course title: Methodology of didactical-methodical research in education (DMH001H1)

Status: elective ECTS: 15

Requirements: none Learning objectives

Introducing methodology of educational research.

## Learning outcomes

Qualifications for educational research. Adopting and mastering methods and techniques of educational research, processing and interpretation of results.

## **Syllabus**

Theoretical instruction: Pedagogical research focused on didactics and methodology of science education. Stages of pedagogical research. Project of research. Content of project. Methods in pedagogical research. Descriptive method. Experiment in science education. Specificity of pedagogical experiment project. Methodological procedure of sample education. Working on pedagogical documentation. Method of observing. Procedures and instruments of data collecting. Choice of procedures and instruments. Characteristics of instruments. Interview. Questionnaire. Testing. Research report. Using research results. System analysis as methodological procedure, formulation of goal and tasks of system studies. System basis of science education. Algorithm of structure and functions in studying and education of science group of courses. Concept of organization, methods and form of realization of education; Concept and projecting of educational means and other equipment in science education; Concept of a textbook and other literature; conception of functioning and projecting of cabinet and laboratory.

*Practical instruction:* Making notional project of research. Making instruments for collecting research data. Choice of sample. Processing data.

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of	Student research:	
		teaching: 5		