Level: bachelor

Course title: Hydrogeology

Status: elective

ECTS: 6

Requirements: none

Learning objectives

Mastering hydrogeological terms, conditions of groundwater occurrence and features, and defining the main laws on processes and phenomena in the underground hydrosphere.

Learning outcomes

Acquired knowledge on hydrogeological terms, conditions of groundwater occurrence and their features and qualifications for causal understanding of problems regarding the laws within processes and phenomena in the underground hydrosphere. Understanding the concept of importance of groundwater for human life and the need for its protection and rational use.

Syllabus

Theoretical instruction

Topics and tasks of hydrogeology. Water cycle in nature and water balance. Ground water and its origin. Hydrogeological features of rocks and conditions for groundwater occurrence. Feeding and movement of groundwater. Types and features of aquifer. Deep thermal and mineral waters. Physical and chemical features of groundwater. Types and features of springs. Importance of ground water. Exploitation of groundwater.

Practical instruction

Conditions for groundwater occurrence. Methodology of hydrological annals use and statistical processing of data related to groundwater. Methodology of studying the aquifer regime. Methodology for measuring the spring flow. Seminar paper preparation. Field work.

Weekly teaching load: 4(60)				Other: -
Lectures: 2	Exercises: 2	Other forms of teaching: -	Student research: -	