Level: bachelor

Course title: Field methods in Geoecology

Status: elective

ECTS: 6

Requirements:

Learning objectives

Training students for independent fieldwork. Knowing and recognizing the characteristics of rocks, soil and water, and contemporary geomorphological processes, will enable students to select the optimal methods and sampling techniques, and present the results of field research on the geoecological maps.

Learning outcomes

Students will gain experience of their own perception of geoecological phenomena. Being qualified for independent fieldwork – geological section preparation and description, sampling of rocks, soil and water. Students should acquire the ability to produce concise and meaningful written and graphic expression of the existing cartographic material.

Syllabus

Theoretical instruction

Introduction: Geospheres – lithosphere, pedosphere, atmosphere, hydrosphere. Classification and identification of rocks. Igneous and metamorphic rocks. Sedimentary environment and sedimentary rocks. Modern geomorphological proecesses. Soil classification. Cartography in Geoecology - topographic and geologic maps. Sample and sampling - basic concepts. Methods and techniques of rock and soil sampling. Selection and preparation of the profile. Profile description. Air sampling methods. Water sampling methods. Geoecological mapping. Interpretation of the results of fieldwork.

Practical instruction

Fieldwork: orientation in the nature and on the map. Identifying types of rocks and minerals in the field. Measuring the position of the layers. Introducing to erosion processes. Field notebook. Sampling. Geoecological mapping.

Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	