

Level: bachelor				
Course title: Environmental monitoring				
Status: obligatory for OZZS/elective for OKK				
ECTS: 9				
Requirements: none				
Learning objectives Students learn to design environmental monitoring. This course provides the basis for a more detailed knowledge of the application of various techniques in monitoring the environment, methods and procedures for obtaining information on environmental quality, data analysis in order to manage the environment.				
Learning outcomes Obtain the necessary knowledge in taking environmental samples, selecting the method of analysis, data management, data analysis, producing reports, using the information for the purpose of environmental management.				
Syllabus <i>Theoretical instruction</i> Determination of the required information for environmental management (identification of information needs, defining notification procedures and the use of interesting information for environmental management and determining which is the most suitable statistical method to obtain the desired information.) Determination of information that can be obtained by monitoring (defining a representative sample of the population for environmental quality, selection of statistical methods that can be applied to generate the required information, including requests for that data; studying ways to identify which information is available, comparison of the requested information to that which can be obtained by monitoring). Designing a monitoring network (master necessary knowledge to select a location for sampling, determining what needs to be measured and the calculation of the sampling frequency). Documentation of procedures for data collection (the study of methods and procedures of field sampling, selection methods and performing laboratory analysis, depending on the needs of monitoring and studying the data management). Documentation of procedures for the implementation and dissemination of information (the study of the application of hardware and software data analysis, application for disclosure and reporting requirements for the frequency and procedures for the use of information on the quality of the environment). <i>Practical instruction</i> Practical instruction follows the theoretical one.				
Weekly teaching load				Other:
Lectures: 2 (30)	Exercises: AV 2 (30) LV 2 (30)	Other forms of teaching: 1 (15)	Student research:	