Level: PhD		
Course title: Sediment Quality – advanced course		
Status: elective		
ECTS: 15		
Requirements: none		

Learning objectives
The aim of the course is to improve students' knowledge of the sediments and the processes that occur in the sediments as integral parts of the aquatic ecosystems, to supplement the knowledge of students about modern sediment quality assessment methodologies, as well as to prepare students for independent decision-making on the quality of the sediment, which is necessary for successful management of aquatic ecosystems with sediments being their integral part.

Learning outcomes
Full understanding of the importance of sediments for the functioning of aquatic ecosystems and the processes that occur in the sediments, as well as the capability of students' independent use of sediment quality assessment methodology and independent decision-making relevant to the management of aquatic ecosystems.

Syllabus
Theoretical instruction
Indicators of the sediment quality. Physical properties of sediments. Pollutants relevant for sediment quality and emerging pollutants. Physico-chemical interactions in the sediment/water system and factors controlling them. Factors that influence the direction and intensity of interactions in the sediment/water system. Bioavailability and the factors affecting the bioavailability of the most important classes of pollutants. Methods for the assessment of bioavailability of pollutants. Monitoring design, sediment and pore water sampling. Legal and conceptual frameworks for sediment management.

Practical instruction
Development of projects on a selected topic from the curriculum.

Weekly teaching load				Other:
Lectures: 5 (75)	Exercises: -	Other forms of teaching: -	Student research: 5 (75)	-