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| Level: Master | | | | |
| Course title: Sediment quality | | | | |
| Status: elective | | | | |
| ECTS: 6 | | | | |
| Requirements: none | | | | |
| Learning objectives The aim of the course is to deepen students' knowledge of sediments as important segments of aquatic ecosystems, the processes that occur in the sediments and modern methods of sediment quality assessment, as well as to prepare students for the successful management of aquatic ecosystems, in which sediments are an integral part. | | | | |
| Learning outcomes The student will be able to quote and explain the importance of sediments for the functioning of aquatic ecosystems; interpret processes occurring in sediments; independently apply methods of sediment quality assessment as a precondition for the successful management of aquatic ecosystems. | | | | |
| Syllabus <i>Theoretical instruction</i> Sediment quality indicators. The composition and structure of the mineral fraction of the natural organic matter. Pollutants relevant to sediments. General characteristics of the physical and chemical interactions in the sediment /water system and factors controlling them. Factors influencing the direction and intensity of interactions in the sediment /water system. Bioavailability. Methods for the assessment of pollutant bioavailability. Planning and design of monitoring, sediment and pore water sampling. Legal and conceptual frameworks for sediment management. <i>Practical instruction</i> The student will apply different methodologies to assess the quality of a sediment sample in terms of heavy metals pollution. | | | | |
| Weekly teaching load | | | | Other: |
| Lectures: 2 | Exercises: | Other forms of teaching: 2 | Student research: - | - |