

Course: Environmental DNA		Doctoral School of Chemistry and Environmental Sciences
Lecturer: Dr. Kálmán Tapolczai		Academic title: Postdoc researcher
Contact hours: 3	Exam: term mark	Credit: 6
<p>Aims: The aim of the course is to introduce students environmental DNA, how to analyse it and its application.</p>		
<p>Thematic: The subject will introduce the definition of environmental DNA and a set of its application in biodiversity analyses and biomonitoring..</p> <p>Possible topics of the subject:</p> <ol style="list-style-type: none"> 1. Introduction to environmental DNA (eDNA) 2. DNA metabarcode choice and design 3. Reference databases 4. Sampling 5. DNA extraction 6. DNA amplification and multiplexing 7. DNA sequencing 8. DNA metabarcoding data analysis 9. Single-species detection 10. Environmental DNA for functional diversity 11. Freshwater ecosystems 12. Terrestrial ecosystems 13. Paleoenvironments 14. Diet analysis 		
<p>Suggested textbooks: Pierre Taberlet, Aurélie Bonin, Lucie Zinger, Eric Soissac (2018): Environmental DNA for biodiversity research and monitoring; Oxford University Press; Oxford, United Kingdom</p>		
<p>Student's role: Essay from a chosen topic.</p>		