

<b>Study Programme: BSC in Biology and BSc in Ecology</b>			
<b>Degree level: Bachelor degree</b>			
<b>Course Title: Wildlife molecular forensics</b>			
<b>Professor: dr Vesna Milankov</b>			
<b>Subject: OBE021</b>			
<b>Elective Course</b>			
<b>Number of ECTS: 6</b>			
<b>Prerequisites:</b>			
<b>Course Objective:</b> The Wildlife molecular forensic subject focuses on the use of DNA profiling in wildlife forensic science by testing species and genetic linkage. The objective is the use of molecular markers and methods in wildlife conservation, endangered species and genetic assignment of individuals under wildlife crimes.			
<b>Course Outcome:</b> The course provides the students with the role of forensic science in wildlife crimes.			
<b>Course Content:</b>			
<i>Theoretical part</i> Conservation Genetics, Molecular Ecology, Molecular Phylogeny, Phylogeography and Taxonomy in wildlife forensics; wildlife DNA forensic science; role of non-human DNA in forensic science; performing DNA typing in wildlife investigations; genetic loci used in species testing; forensic and management applications of genetic identification; evaluation of DNA evidence in wildlife cases.			
<i>Practical part</i> Wildlife forensic science testing; methods in wildlife forensic DNA analysis; nDNA, mtDNA and cpDNA in forensic science; DNA barcode in assessment of management units and evolutionarily significant units; use of data on GenBank and sequence alignment; DNA taxonomy: pros and cons; use of NCBI / EMBL / DDBJ and BOLD base data; evaluation of relevant case study using scientific papers.			
<b>Reading List:</b> Миланков, В. (2007) Биолошка еволуција. ПМФ, Нови Сад. Уџбеник Gennard, D. (2012) Forensic Entomology: An Introduction, 2nd Edition. Wiley-Blackwell Linakre, A., Tobe Shanahan, S. (2013) Wildlife DNA analysis: application in forensic science. Wiley-Blackwell.			
<b>Total hours:</b>			
Lectures: 2	Practicals: 2	Other:	Student research work:
<b>Methods of instruction:</b> Video beam and overhead presentation			
<b>Assessment (maximum number of points 100)</b>			
<b>Requirements</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Active participation in lectures		Practical exam	
Active participation in practicals		Oral exam	70
Test(s) or	30		
Pre-exam testing			
<b>Remark:</b>			