

<b>Study Programme : PhD in Biology</b>				
Degree level: Doctoral degree				
<b>Course Title: Phylogenetic Systematics of Animals</b>				
<b>Professor: Ivo Karaman</b>				
<b>Required/Elective Course: Elective</b>				
<b>Number of ECTS: 15</b>				
<b>Prerequisites:</b>				
<b>Course Objective:</b> Achieving knowledge in interdisciplinary subject of phylogenetic systematics. Understanding of basic principles and use of different methodological approaches in phylogenetic systematics.				
<b>Course Outcome:</b> Acknowledge of phylogenetic approach in systematics and basic methods in phylogenetic investigations.				
<b>Course Content:</b> <i>Theoretical part</i> Tasks in phylogenetic systematics. Phylogenetic systematics and alternative. Species concept, speciation. Taxonomy of lower categories, metamorphisms, polymorphism and cyclomorphism. Chorological relationships of individuals and their significance for the taxonomy. The species category in the time dimension. Taxonomy and taxonomic methods in the higher group categories. Monophyly, polyphyly and paraphyly. Sister groups. Dichotomy and Radiation. Phylogenetic trees. Cladistics, methods. Characters and phylogenetic reconstruction. Phylogenetic classification. Phylogenetic biogeography.				
<b>Reading List:</b> 1. W.Henning: Phylogenetic Systematics. University of Illinois Press, Urbana, 1979 2. R.T. Schuh: Biological systematics. Principles and applications. Cornell University Press, 2000				
<b>Total hours:</b>				
Lectures: 5	Practicals:	Other:	Student research work:5	
<b>Methods of instruction:</b> Interactive methods. Seminar work.				
<b>Assessment (maximum number of points 100)</b>				
<b>Requirements</b> seminar work 30 oral exam 70				
<b>Remark:</b>				