

<b>Level:</b> PhD				
<b>Course title:</b> Quaternary paleoenvironments and paleoecology changes				
<b>Status:</b> elective				
<b>ECTS:</b> 11				
<b>Requirements:</b> None				
<b>Learning objectives</b> Explain and illustrate the changing nature of environments through Quaternary, from the well-dated and complete paleoenvironmental records. Interpreting a range of paleoclimatic, paleoenvironmental and paleoecological data, and critical insight into the current understanding of environmental change, including the evolutionary adaptations of organisms to these changes.				
<b>Learning outcomes</b> Students should gain a basic understanding of: Techniques used in paleoenvironmental reconstruction; How we make environmental interpretations from various types of sedimentological, geochemical and isotopic records; Evolutionary adaptations of organisms to changing environments; How various types of macro- and microfossils are used in paleoenvironmental and paleoecological reconstruction.				
<b>Syllabus</b> <i>Theoretical instruction</i> Overview of climatic and ecological changes, most significant paleoclimatic models (SPECMAP, CLIMAP), most significant paleoclimate terrestrial and ocean archives, Milanković theory of the ice ages, Quaternary climate variability, last glacial maximum and future climate change.  <i>Practical instruction</i> Fieldwork (loess paleosol sequences), methods of sampling and methods for reconstruction paleoclimatic and paleoenvironmental changes.				
<b>Weekly teaching load</b>				Other:
Lectures: 4	Exercises: 0	Other forms of teaching:	Student research:	