Study programme: MAS Geography

Course title: Field work 5

Teacher(s): <u>Imre I. Nagy</u>

Status: compulsory

ECTS: 3

Requirements: none

Learning objectives

Introducing students to methods of Geoinformatics and Geoecology as well with analytical software tools. At the same time, students get acquainted with the way of exploring, analyzing and concluding certain geographical parameters in the field.

Learning outcomes

Practical learning in the field of Geoecology and Geoinformation

Syllabus

Theoretical part:

As a part of field work realisation, student will have preparatory classes during which will be introducedr with the work plan, and their activities and tasks in the field or selected institutions. After completion of the preparation of teachers and students, the implementation of practical and field work will start.

Practical part:

Geoecology - Work on tools for the analysis of bio-climatic and geoecological parameters in urban areas (2-4 weeks at the Department of Climatology and Ecology of the University of Szeged); Spatial analysis of hydrological processes in the Pannonian Basin (2-4 weeks at the Department of Physical Geography and Geoinformatics of the University of Szeged); Monitoring geoecological processes in protected natural areas (Fruska Gora National Park, followed by Upper Danube, Zasavica).

Geoinformatics - The process and methods of spatial analysis (several weeks on the Military Geographical Institute, Belgrade); Measuring instruments for obtaining the spatial data and their analysis using geoinformation software (2-4 weeks at the Department of Physical Geography and Geoinformatics of the University of Szeged); Spatial analysis of parameters of urban surfaces (2-4 weeks at the Department of Climatology and Ecology of the University of Szeged compartment).

Literature

Jorgensen, S. E. (2009): *Applications in Ecological Engineering*. Elsevier B.V. Amsterdam Alexander, M. (1994): *Biodegradation and Bioremediation*. Academic Press San Diego Burrough, P.A., Mcdonnel R.A. 2006. Принципи географских информационих система, Грађевински факултет, Универзитета у Београду: 1-414. Tan, P.N., Steinbach, M., Kumar, V. 2006. Introduction to Data Mining. Addison-Wesley, Boston: 769 pp.

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Weekly teaching load 3 (45)	Other form of teach	ing 3		
Methods of Teaching				
Grading method (maximu 100 points)				
Pre-examination assignments	points			

Pre-examination assignments	pomis	
Activities during Field work	0-100	