Study programme: MAS Geography

Coursle title: GIS Standards and Spatial Data Infrastructure

Teacher(s): dr Vladimir N. Marković

Status: elective ECTS: 5

Recuirements: none

Learning objectives: The goal of this course is to acquire knowledge of the standards in GIS, reference data and process models, terminology, protocols and ISO standards, as well as the knowledge of the source, check, storage and use of spatial data analysis and modeling of space.

Learning outcomes: Knowledge and skills for the analysis, modelling, and the use of spatial representation - georeferenced data, using a common protocol for implementation of the standard model of spatial and non-spatial data, different types of GIS databases and standard GIS terminology.

Syllabus

Theoretical part:

Introduction to Spatial Data Infrastructure standards. Standards of attribute data. Services and protocols for data exchange. Standard GIS terminology. Metadata. ISO Standards. Open GIS.

Practilac part:

Transformation of spatial data. Locating the entity with the given set of attributes. Analysis of overlapping layers. Network analysis. Digital terrain analysis. Geo-visualization.

Literature

- 1. INSPIRE directive. European Commission. http://inspire.ec.europa.eu/
- 2. Burrough, P & McDonnell R (2006) *Principi geografskih informacionih sistema*, Građevinski fakultet Univerziteta u Beogradu (prevod), Beograd.
- 3. Marković, V., Klaučo, M., Stankov, U., Jovanović, T.,Ristić, Z. 2014. Evaluation of Human Impact on the Land Cover Trough Landscape Metrics: Nature Park "Šragan-Mokra Gora" (Serbia). Rocznik Ochrona Środowiska, Vol. 16. pp. 52-73.

Weekly teaching load 3 (45) Lectures 2 Exercises 1

Methods of Teaching: Lectures, Illustration and Demonstration, Practical skills.

Grading method (maximu 100 points)

Pre-examination assignments	points	Final examination	points
Activities during lectures	0-5	Written examination	
Activities during exercises	0-5	Oral examination	30-45
Colloguia	20-40		
Seminar paper	0-5		