**Study-program**: Master in Geography

Level: master

Course title: Visualization of spatial data

Teacher: Ristanović Branko, PhD, associate professor

**Subject status**: Obligatory

**ECTS**: 8

Requirements: none

## **Learning objectives:**

To provide students with the knowledge in Geoinformatics - science that uses information science infrastructure to address the problems of the Earth Sciences and other problems related to some branches of engineering, as well as geospatial data that are spatially defined relative to the Earth.

# **Learning outcomes:**

Use of geographic information gained by manipulating the geospatial data on computerized systems.

## **Syllabus:**

Theoretical instruction:

Geoinformatics, Geographic Information, Geographic Information Systems, spatial data models, spatial data, spatial data organization, visualization of spatial data (cartographic display, 3D, OpenGL).

#### Practical instruction:

Interpolation, geostatistics, georeferencing, vector data sorting and retrieval of spatial data, spatial data modeling, GIS analysis.

#### **References:**

- 1. Burrough P. A., McDonnell R. A. (2006): Principles of Geographic Information Systems, Civil Engineering, University of Belgrade
- 2. Longley P.A., Goodchild M.F., Maguire D. J., Rhind, D.: Geographic Information Sistems and Science

	Other: -			
Lectures: 3	Exercises: 2	Other forms of teaching:	Student research:	

### **Methods of teaching:**

Monologue-dialogue, illustration and surveying, fieldwork.

Grading (maximum score 100)					
Pre-exam	points	Final exam	points		
Activity during the lectures	0-5	written exam			
Practical training	0-5	oral examination	30-45		
Tests	20-40				
Seminars	0-5				