Geomorphological mapping and geovisualization

Download documents from: https://github.com/SimonMartinCH/gmg

Syllabus

	Monday 20th	Tuesday 21st	Wednesday 22nd	Thursday 23rd
9:00		**Methods for field mapping** *in Morasko nature reserve*	**Geovisualization** Forms, functions, uses	**Workshop 3** *Web mapping (Leaflet)*
10:30	Pre-test **Geomorphological mapping (GM)** General concepts			
11:00	Visual media Legend systems **Methods for GM** General work flow		**Web mapping** Functions, structure, tools	
12:00	Mapping on digital data			
13:30	Presentation **Workshop 1** *GM (QuantumGIS)* Distribution of study	**Workshop 1** *GM (QuantumGIS)* Digitalization of landforms. Application of legend.	**Workshop 2** *Draped GM (GEarth)* 2.5D visualization	**Workshop 3** *Web mapping (Leaflet)*
15:00	areas and data.			
15:30	Explore the area. Adapt the legend. Create terrain analysis data from DEM. Digitalization of	Preparation of the final geomorphological map (for the poster).	Create the poster with map, 2.5D vis, and comments.	Presentation of posters Post-test Conclusion
17:00	landforms.			

Lecture room || Computer lab || Field trip

Competences

A. Geomorphological mapping

1. Know the different approaches of GM and legend systems
2. Methods for field mapping (basic knowledge)
3. Computer mapping on GIS (digitalization based on digital field data)
4. Create/adapt own legend on GIS
5. Basic spatial analysis (slope, aspect, roughness)
6. Produce a printable map

B. Geovisualization

1. Know the basic principles and the variety of tools
2. Create a 2.5D view by draping GIS data (using GoogleEarth and other tools)
3. Create a basic web map from GIS to Leaflet API (using GeoJSON)

C. General

1. Self organization, schedules
2. Graphic and oral presentation of the work