

# Geomorphological mapping and geovisualization

|       | Tuesday 6th  | Wednesday 7st   | Thursday 8th   | Friday 9th   |
|-------|--|---|--|--|
| 9:00  |  | <b>Methods for field mapping</b><br><i>in Morasko nature reserve</i>  | <b>Geovisualization</b><br>Forms, functions, uses  | <b>Workshop 3</b><br><i>Web mapping (Leaflet)</i><br><i>GeoJSON format</i> |
| 10:30 | Pre-test<br><b>Geomorphological mapping (GM)</b><br>General concepts   |   |  |  |
| 11:00 | Visual media<br>Legend systems<br><b>Methods for GM</b><br>General work flow                                     |   | <b>Webmapping</b><br>Functions, structure, tools   |  |
| 12:00 | Mapping on digital data  |   |  |  |
|       |  |   |  |  |
| 13:30 | Presentation<br><br><b>Workshop 1</b><br><i>GM (QuantumGIS)</i><br>Distribution of study areas and data.         | <b>Workshop 1</b><br><i>GM (QuantumGIS)</i><br>Digitalization of landforms.<br>Interpretation (attribute / legend). | <b>Workshop 2</b><br><i>Draped GM (GEarth)</i><br>2.5D visualization.<br>KML file format.            | <b>Workshop 3</b><br><i>Web mapping (Leaflet)</i>                          |
| 15:00 |  |   |  |  |
| 15:30 | Explore the area.<br>Adapt the legend.<br>Create terrain analysis data from DEM.<br>Digitalization of landforms. | Create printable map with title, legend, ...  | Create the poster with map and 2.5D vis, along with general description, interpretation and methods. | Presentation of posters<br>Conclusion<br>Post-test                         |
| 17:00 |  |   |  |  |

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