

Name of the subject: GIS platforms		
Lecturer(s): Minučer Mesaroš		
Status of the subject: obligatory		
Number of ECTS points: 6		
Condition: -		
Goal of the subject Acquisition of theoretical knowledge and practical skills related to the use of GIS platforms..		
Outcome of the subject Students will be equipped to understand the functions and recognize the appropriate GIS platform for achieving the objective of researching or analyzing a specific problem task and space.		
Content of the subject <i>Theoretical instruction</i> Origin and development of GIS platforms. The most advanced GIS cloud services and platforms for collecting, storing, processing, and distributing geodata. GIS software architecture and functionality. Overview of contemporary GIS solutions: GIS software, desktop GIS programs, spatial database management systems, web services, server GIS programs, web GIS client programs, GIS add-ons, mobile GIS. Freely available GIS platforms. Examples of GIS platform applications. <i>Practical instruction</i> Training students to use selected GIS platforms through practical work on a computer (Google Earth Engine - JavaScript and ArcGIS online Python API). Presentation of the results through specific examples, which involves the creation of a assignment project in the used software environment.		
Recommended literature 1. QGIS Development Team (2024): QGIS User Guide Release 3 2. McNerney, D. Kempeneers, P. (2016): Open Source Geospatial Tools: Applications in Earth Observation, Springer International Publishing 3. Jiang, Z., Shekhar, S. (2017): Spatial Big Data Science: Classification Techniques for Earth Observation Imagery, Springer International Publishing		
Number of active classes	Theory:3	Practice:2
Methods of delivering lectures Lecturing method, illustrative-demonstrative method (computer-based work), practical instruction.		
Evaluation of knowledge (maximum number of points 100) Assignment project 50 pts Oral exam 50 pts		