

Study programme: Bachelor with honours in Geography			
Course title: GIS Softwares (GI405)			
Teacher(s): dr Minučer Mesaroš			
Status: elective			
ECTS: 6			
Requirements: none:			
Learning objectives Training students for individual and independent use of various software solutions, as well as the successful application of new versions of existing software packages for geospatial data analysis.			
Learning outcomes Developed skill of individual finding and use of various GIS software packages, on varying operating system platforms. Knowledge of the most frequently used file types for geospatial data transfer. Developed skill of platform selection – finding the most optimal operating system and program for solving concrete problems in geospatial data acquiring, processing and graphical representation. Knowledge of various standards and file formats and their conversion.			
Syllabus <i>Theoretical part:</i> History of development of the most frequently used GIS software packages. Operative systems and hardware configurations. Client-server architecture. The most important functions of GIS software – data input, query, processing and visualisation. WEB GIS. GIS standards and interoperability. The most recent trends in GIS software development. <i>Practical part:</i> Working with the most frequently used commercial and free program packages for processing, analysis and visualization of geospatial data on various operating systems (LINUX, WINDOWS).			
Literature 1. Mesaroš, M., Šećerov, I., Praktikum - GIS Softveri, Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo, Novi Sad. 2. Srbović, D., Gajović, V. (2015). ArcGIS for Desktop 10x- Korisničko uputstvo. GD i GISDATA, Beograd. 3. User manual of open source GIS software packages			
Weekly teaching load 4 (60)		Lectures: 3	Exercises: 1
Methods of Teaching Oral presentations, illustrative-demonstrative method (on the computer), practical classes.			
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
Colloquia	5-10	
Seminar paper	0-35		