Study program: OAS Geoinformaika

Name of subject: Application of GIS in Public Administration

Lecturer: Dr Uglješa B. Stankov

Subject status: Elective

ECTS Number: 6

Condition : none

Course objectives

Training of students for the application of GIS in administration at the local, regional and national level.

Outcome of the course

The student will know the possibilities of applying GIS in public administration, from the local to the national level. He will able to participate in supporting the process of transparent and rational decision-making by dissecting and linking complex geographical characteristics of space, integrating with the standards defined by the national spatial data infrastructure, legal, ethical, environmental norms.

Course content

Theoretical classes

Concepts and theories of GIS application in public administration. GIS management. National Spatial Data Infrastructure. GIS and Public Policies - Education, Health and Safety, Public Services, Environment, Social Services and International Policy. GIS tools and their implementation for decision-making at the level of local self-governments. Aspects of GIS use in local self-government – integration of public values, promotion of efficiency, promotion of equality, community and quality of the environment. Policymaking in the GIS era – ethical and legal issues, GIS ownership, visual storytelling. Components of GIS strategic planning - strategic, tactical, technical, logistical and political components. Strategic GIS planning – needs assessment, design of alternative conceptual systems, final implementation plan. GIS training, education and knowledge transfer. Rate of return on investment. Challenges, barriers and future technologies of GIS in public administration.

Practical classes

Practical classes are realized through the analysis of selected case studies (legal frameworks for GIS of local self-government or institutions; GIS communication infrastructure; complete procedure for the introduction of GIS in the local self-government or institution; example of the introduction of GIS in local self-government) and through the performance of professional practice in a selected institution.

Literature

1. Jovanović, V., Đurđev, B., Srdić, Z., Stankov, U . (2012): Geographic Information Systems. University of Novi Sad, Faculty of Natural Sciences and Mathematics; Singidunum University; Novi Sad; Belgrade.
2. Greene, R. W. (2000). GIS in public policy: Using geographic information for more effective government. ESRI Press, Redlands.
3. Holdstock , D. A. (ed.). (2016). Strategic GIS Planning and Management in Local Government. CRC Press. Boca Raton
4. O'Looney, J. (1997). Beyond maps: GIS and decision making in local government. ESRI Press, Redlands.
5. Voerkelius , U., Glavina, J., Specht-Mohl, C., Schilcher, M., Cvetković, B. Danilović, K., Petrović, D. (2008). GIS Manual for Local Self-Governments in Serbia. Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Standing Conference of Towns and Municipalities (SCTM); Eschborn Belgrade.

Number of active teaching hours: 5(75)	**Theoretical Teaching: 3**	**Practical classes: 2**

Teaching methods

Frontal teaching through multimedia presentations. Individual and group work on the computer. Independent practical work

Proficiency assessment (maximum number of points 100)

Pre-examination obligations	Points	**Final exam**	Points
activity during the lecture	**0-5**	Written exam	
Practical classes	**0-5**	Oral ISPT	**30-45**
colloquium	**0-5**	.....	
Seminars	**20-40**		