Information sheet for the course
GIS in Public Administration

University: *Alexander Dubček University of Trenčín*	
Faculty: *Faculty of Social and Economic Relations*	
Course unit code: *VSPV12*	**Course unit title:** *GIS in Public Administration*
Type of course unit: *compulsory optional*	
Planned types, learning activities and teaching methods: **Form of study:** *Lecture / Seminar* **Recomended scale of study (in hours):** **Weekly:** 1 / 1 **For the study period:** 14 / 14 **Study method:** ***in-class***	
Number of credits: *3*	
Recommended semester: *3. semester in the 2st year (full-time)* *5. semester in the 3nd year (part-time)*	
Degree of study: *I. (bachelor),*	
Course prerequisites: none	
Assesment methods: *In the course of the semester there will be 2 written verification of project work-outs per 30 points: Rated A - at least 55 points, Rated B - at least 50 points, Rated C - at least 45 points, Rated D - at least 40 points, Rated E - at least 35 points. Credits shall not be granted to a student who checks written from a yield of less than 15 points. At the end of the semester during the examination period:* ***Project.*** *The credit after the project submitting and its evaluation. The resulting - made diameter.*	
Learning outcomes of the course unit: *Student by completing the course will gain knowledge on the functioning and extensive potential uses of geographic information systems (GIS) for the purposes of public administration and regional development. Student will be able to create his/her own GIS projects, use outputs from the GIS environment and define the basic requirements for the structure and functioning of the GIS database. Student will understand how to use different knowledge into a GIS environment and then transfer them into various development plans and concepts. After completing the course the student will be able to do basic map printouts for decision-making processes in public administration and therefore will be able to work independently in a standard GIS product environment.*	
Course contents: *1. Introduction to the study. Informatization, meaning, types of information. Historical development.* *2. Infromatiztion and internetization and public administration. The concept of e-GOVERMENT. State information system.* *3. Internal and external information systems. Modern computer networks - Internet, intranet and extranet.* *4. Hardware and software for spatial information systems. Input and output devices, the basic parameters of computer units. Operation, maintenance, information sharing and security.* *5. Spatial (geographic) information systems. Spatial information, maps, methods and systems for GIS data collection. The methods of data storage in GIS.* *6. Creating a GIS project. Enter data into the GIS, data homogenization, change coordinate systems.* *7. Managing GIS databases in the environment. Queries to the database.* *8. Geographic data analysis and modeling in GIS environment.* *9. Outputs creation in GIS environment. Tools for creating maps, charting, numerical outputs.*	

10. Errors data and their removal. Special tools and functions of GIS.
11. Creating and using application modules on the platform of GIS in state and local government.
12. Standardization of spatial information in the world and Slovak Republic. Current state of creation of databases for GIS in Slovakia.
13. Current state of the spatial information systems in the world and the Slovak Republic. Modern software products, development trends.

Recommended of required reading:

Križanová, Z.: Význam výučby geografických informačných systémov pre študentov študijného odboru 3.3.5 Verejná správa a regionálny rozvoj. In: Sociálno – ekonomický revue č. 4/2011, Trenčín 2011
Tuček, J.: Geografické informačné systémy – Princípy a praxe. Computer Press, Brno 1998
Hofierka, J.: Geografické informačné systémy a diaľkový prieskum Zeme. FHPV PU, Prešov 2003
Tuček, J.: Prvotné zdroje údajov pre GIS (aj na Slovensku). In: Informačný systém o území a prax. Zborník referátov, Topografický ústav, Banská bystrica 2002
Bližťan, P.: Spracovanie dát v GIS. Ústav geodézie a GIS, F-Berg, 2007
Odborná časopisecká literatúra.

Language: *Slovak*

Remarks:
Course is offered in the winter semester of the second year of full time and in the winter semester of the third year of external studies. This course is elective. The number of students in a seminar group ranges from 8 to 10 students.

Evaluation history: *9*

A	B	C	D	E	FX
77.78	22.22	0.0	0.0	0.0	0.0

Lectures: *Ing. Zuzana Križanová, PhD.*

Last modification: *15.04.2014*

Supervisor: *prof. PhDr. Peter Barták, DrSc., doc. Ing. Ján Kútik, CSc.*