

Name of the course: Thematic Maps in GIS	Total credits: 6
Code:	
Type: practice	
Total hours of per semester: 1.5 hours/week (15 weeks x 1.5h) lecture: 50% practice: 50% consultation: Other:	
Type of testing: mark (1-5) based on course work (data base; maps; essays/documentation) Other:	
Semester:	
Description	
When working with thematic maps in GIS, it is essential to know and understand data sources, general methods of data processing and graphic representation of statistical data, as well as the possibilities of GIS, project planning, system implementation and general documentation. In the lessons, we learn about types of thematic maps and the graphic methods that can be used for representing certain data types, the possibilities of using GIS (e.g. topological rules, projection transformations, working with databases and with queries), we discuss the most important principles of map editing, color theories, the compilation of print-ready maps, through a practical task.	
Literature	
Compulsory • Dent, Torguson, Hodler: Cartography – Thematic Map Design. McGraw-Hill Education, 2008 ISBN: 9780697384959 • Slocum, McMaster, Kessler, Howard: Thematic Cartography and Geographic Visualization. Pearson, 2008. ISBN: 9780132298346 • Tyner, J.: Map Design. The Guilford Press, New York, 2010 ISBN: 9781462517121 Recommended • Peterson, G. N.: GIS Cartography. A guide to effective map design. CRC Press, 2015, ISBN: 9781482220674 • Malloy, N. R.: Essential Modeling Techniques for Geospatial Analysis Using ArcGIS. Geospatial institute, EUREKA, 2020	
Competencies	
Knowledge • Creatively understands the connections, theories and conceptual systems and terminology of the given major or field of study. • Possesses the knowledge of research methodology required for independent research in a given science/field of expertise. Competencies • Capable of creative analysis of the given field of expertise, synthetic, new approach formulation of comprehensive and special connections and adequate evaluation and critical activity.	

- Able to creatively develop novel, previously unknown practical aspects of theoretical questions.
- Able to plan and implement new projects, conduct research in a given scientific field, develop new techniques and approaches.
- Able to identify unforeseen professional problems and to explore the detailed theoretical and practical background of the research level necessary to solve them.

Attitude

- Has the interest and learning ability that the field of expertise allows identifying and solving currently unpredictable research problems.
- Has solid professional commitment, dedication to finding new ways, and acceptance of the need for persistent work.

Autonomy and responsibility

- Builds and initiates new areas of knowledge and initiates new practical solutions with constructive and creative independence.
- He is able to participate in the formulation of theoretical and practical questions with a leadership role and a high level of cooperation.