Study programme: MAS Geography	
Course title: Contemporary trends in the development of geoinformatics	
Teacher: dr Uglješa Stankov	
Status: elective	
ECTS: 5	
Requirements: none	

Learning objectives

The goal of this course is to examine issues related to current and future development of geoinformatics and its application with respect to the four dimensions of development: technical, commercial, research and philosophical. The course focuses on a critical review of the implementation and impact of geoinformatics in geography and other disciplines.

Learning outcomes

Students should be able to critically observe the historical development of geoinformatics and its philosophical, methodological, and technological impact on the topics within the framework of this study program, as well as to perceive future trends and developments in the light of modern geoinformation and past experiences.

Syllabus

Theoretical part:

Previous development of geoinformatics. Contemporary trends in technical development of geoinformatics. Open source initiatives. Integration of GIS and the Internet. Cloud-based services. Big data and geo-data. 3D GIS. Spatial data infrastructure on a global level and geo-portals. Real-time GIS. Voluntary geographic information – VGI. Geoinformatics and neo-geography. Current trends in business and commercial applying of GIS. „GeoBI" infrastructure. Personalization and mobile GIS. Future market application of GIS. Philosophical implications of the application of GIS.

Practical part:

Practical familiarization with the most important technologies in geoinformatics. Preparation for seminar essay.

Literature

1. Pourabbas, E. (2014): *Geographical information systems: trends and technologies*. CRC Press. Boca Raton.
2. Burrough, P., McDonnell, R. (2006): *Принципи географских информационих система*. Грађевински факултет Универзитета у Београду. Београд
3. Davis Jr., C.A., Monteiro, A.M.V. (2007): *Advances in Geoinformatics*. Springer-Verlag, Berlin.
4. Karimi, H. (2009): *Handbook of Research on Geoinformatics.* Information Science Reference. Hershey

Weekly teaching load 3	Lectures 2	Exercises 1

Methods of Teaching

- Lecture method

- Demonstration method

- Practical exercise

Grading method (maximum 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	**20-40**	....	
Seminar paper	**0-5**		