

General Information			
Course name	Cartography and Geoinformatics	ECTS Credits	6
		Semester	winter 2/2 per week
Aims			
<p>The main learning outcomes include theoretical and practical skills in cartography. Students understand cartographic terminology, students can apply cartographic approaches and methods, projections and define the content and composition of maps</p> <p>By the end of the course the student will be able to:</p> <ul style="list-style-type: none"> - understand main organisational and operational issues in the use of cartographic principles in GIS - understand cartographic coordinates systems and datum - describe and use proper methods of cartographic visualisation of spatial data - define a role of cartography in term of solving GIS project 			
Contents			
<p>Cartography – basic definition, Topographic mapping Geiod, datum, cartographic projections Global coordinate systems and projected coordinate systems Cartographic methods Composition of maps, Content of maps, map colours, map annotations and labels Cartographic generalisation, Organisational aspects of map production Digital representation of landscape Data acquisition and data processing Visualisation and cartographic presentation, geometric and attribute dimensionality of spatial data Modern trends in cartography</p>			
Assessment Methods and Criteria			
<p>During the semester student has to submit the assignments of the seminars. The final assessment of the seminars is based on „fulfilled / not fulfilled“ method.</p> <p>The final assessment is based on final exam. The student can undertake the final exam only after successful completion of the seminars.</p> <p>The final exam consists of two parts:</p> <ul style="list-style-type: none"> - a written part – to get the A mark student has to obtain at least 92 % of the total points, to get B at least 84 % of the total number of points , C at least 75 % , D at least 68 % , E at least 60 % of total number of points. - an oral part – a student choses two questions from the two groups. (1 question from the theoretical and thematic cartography, one question from mathematical cartography). <p>The final assessment is calculated as a weighted average of the written part (1/3) and oral (2/3), while the student must obtain at least mark E from both parts of the final exam.</p>			

Grading Scale (in %):

Grading System: The University recognises the following six degrees for the Assessment Methods and Criteria of the study results: a) A – excellent (excellent results) (numerical value 1) b) B – very good (above average results) (1.5) c) C – good (average results) (2) d) D – satisfactory (acceptable results) (2.5) e) E – sufficient (results meet the minimum criteria) (3) f) FX –failed (requires further work) (4)

Bibliography

ROBINSON, A. H. ET AL. 1995: ELEMENTS OF CARTOGRAPHY. WILEY&SONS. 674 S.

LONGLEY, P. A., GOODCHILD, M. F., MAGUIRE, D. J., RHIND, D. W. 2001: Geographic Information Systems and Science. John Wiley & Sons.

LONGLEY, P. A., GOODCHILD, M. F., MAGUIRE, D. J., RHIND, D. W. 1999: Geographical Information Systems: Principles, Techniques, Management and Applications. John Wiley & Sons.

SHEKHAR, S., XIONG, H. 2008: Encyclopedia of GIS. Springer.

WILSON, J. P., FOTHERINGHAM, A. S. 2008: The Handbook of Geographic Information Science. Blackwell Publishing.

