Introduction to Cartography
Introduction: maps and cartography. Spatial orientation and cognitive maps. The cultural history of maps as visualization interfaces. Cartographic data and information: geodesy, remote sensing, GPS, data bases. Spatial reference systems: geographic coordinates and geodetic datum. Cartographic projections. Scale, coverage and format. Generalization as graphic interpretation of information. Cartographic communication: symbols and typography. Relief representation methods. Topographic and reference maps. Thematic maps: representation of geospatial data. Principles of designing maps: layout and visual hierarchy Orientation, wayfinding and navigation with maps. Digital cartography and GIS. Webcartography and geocommunication.
Literature: Kraak, M. J. and F. J. Ormeling: Cartography: visualization of spatial data. New York, Guildford Press. 2011, (2013) Mark Monmonier: How to lie with maps. Univ. of Chicago Press, 2005.
Suggested literature: John Kryger – Denis Wood: Making maps. A visual guide to map design for GIS. 2011. Alan McEachren: How maps work. Representation, Visualization, and Design. 2004. Judith Tyner: Principles of Map Design. The Guilford Press. 2002 Borden Dent: Thematic Map Design. 1993. Norman J. Thrower, Maps and Civilization: Cartography in Culture and Society, 2008 International Cartographic association: The World of Maps. 2014. http://mapyear.org/files/wom/IMY_WoM_en.pdf)