## **Cartographic Software**

- Introduction to cartographic software. Basic principles.
- The history of OCAD, older version's functionality
  - o A general overview about OCAD: basic drawing and editing functions
  - o Planning symbol sets, creating and editing symbols
  - o Colors and spot colors in OCAD
  - o Importing and exporting files. Importing OpenStreetMap data.
  - o Printing
  - o Database connection and management in OCAD: Shape files
  - Usage of digital elevation models: importing, file formats, contour lines, hypsometry and hill shading
  - o GPS data import
  - o Layout
  - o Internet maps
- OpenStreetMap: the free editable map of the world. Volunteered geographic Information.
- Automations in cartographic generalization:
  - o Basic principle of automations on maps.
  - o The most important line and polygon generalization algorithms.
  - o Point generalization
  - o Testing of algorithms in software: ArcGIS and QGIS, mapshaper.org.

## Literature:

## www.ocad.com

Okada, Alexandra, Buckingham Shum, Simon, Sherborne, Tony (Eds.): Knowledge Cartography, Software Tools and Mapping Techniques

Springer, 2014

Ian Muehlenhaus: Web Cartography: Map Design for Interactive and Mobile Devices, CRC Press, 2013

Slocum, McMaster, Kessler, Howard: Thematic Cartography and Geographic Visualization. 2005. Scale and generalization chapter.

## **Suggested literature:**

V. Vozenilek: Cartography for GIS Palacky University Olomouc, 2005

ISBN 10: 8024410478 / ISBN 13: 9788024410470