Digital editing of derived maps

Az oktatás célja:

a) knowledge

- Knowledge of methods and tools for professional and effective written, oral and networked knowledge management in cartography and geoinformatics. Ability to evaluate, use as source material and process as a database national and foreign, old and new maps and other cartographic publications (globes, sky globes, relief maps, etc.).
- -Knowledge of the specific tools of the field of cartography and geoinformatics, the mathematical and cartographic principles of editing maps for different purposes, the ability to apply survey procedures, representational solutions and various reproduction technologies.
- Ability to create maps and geoinformatics systems that can be used by economic sectors or clients in the desired field.

b) abilities

- Ability to interpret and formalise complex professional problems in the field of cartography and geoinformatics, to identify the necessary theoretical and practical background and to solve the problem. Ability to provide consultancy, problem-solving, design, development, operation and management of cartographic and geoinformatics systems, decision support systems and expert systems.
- Ability to interpret, plan, organise, manage and control processes in the field of cartography and geoinformatics.
- Ability to learn and apply new problem-solving methods and procedures in the field.

c) attitude

- It monitors professional and technological developments in the field of cartography and geoinformatics and the opportunities that will enable it to work in the public sector, in various companies or to set up and run its own business.
- Shares his/her own knowledge and values the dissemination of professional results in cartography and geoinformatics.
- It is committed to meeting and enforcing quality standards (accuracy, commitment).

d) autonomy and responsibility

- Able to work independently in IT, carrying out tasks, thinking through and developing technical issues in a self-directed manner and at a pace.
- Responsible for meeting and enforcing deadlines. Assumes responsibility for his/her own work and that of his/her colleagues working under his/her direction and with him/her (in a project).
- In the case of mission-critical mapping and geoinformatics systems, may be given development and operational responsibility appropriate with his/her professional competences.

Content of education:

- 1. Introduction to OCAD. Story of the software. Map making in OCAD, general rules.
- 2. Drawing and editing tools
- 3. Further editing tools, background maps, georeferencing maps in OCAD
- 4. Scales, projections in OCAD. Automated grid generation. File export, web maps
- 5. Symbol design: points and lines
- 6. Symbol design: polygons, texts, searching grid. Colors in OCAD
- 7. Importing data in OCAD: Shapefiles, DXF and SVG. Assign symbols to unsymbolized elements
- 8. Working with digital elevation models in OCAD. Hill Shading. Handling GPS data.
- 9. Automations in cartographic generalization
- 10. Editing of smaller scale maps. Map generalization.
- 11. Open Orienteering Mapper

Evaluation system: practical course mark based on course work

Literature:

Obligatory:

- OCAD Documentation: https://www.ocad.com/en/
- Open Orienteering Mapper: https://www.openorienteering.org/

Recommended:

- Faragó Imre: Sokrétű térképészet, egyetemi tankönyv 2014 (digitális tankönyv) ISBN: 9789632844688
- Faragó Imre: Földrajzi nevek 2015 (digitális tankönyv)