Tárgytematika / Course Description
GIS

EKNB_KETA032

Tárgyfelelős neve /
Teacher's name: Magyari Zsófia

Félév / Semester: 2024/25/1

Beszámolási forma /
Assesment: Vizsga

Tárgy heti óraszáma /
Teaching hours(week): 2/1/0

Tárgy féléves óraszáma /
Teaching hours(sem.): 0/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

Objective

Introducing the basics of Geographic information system (GIS), with the possibilities of map data processing, computer evaluation and analysis. This course provides an overview of the GIS techniques and focuses on the mapping and analysing of the collected data.

Learning outcomes

Students will be able to choose the right method to solve different GIS tasks and gain experience in using instruments. (precision GNSS, other data collection GNSS instrument) and in evaluating data.

TANTÁRGY TARTALMA / DESCRIPTION

Topics of lectures

1. GISdefinitions,generalinformation
2. Coordinatesystems,geodesyprojections
3. 2Dand 3D data
4. Database, mapsandattribute data
5. Networkanalysis
6. Spatialanalysis
7. GNSS -GlobalNavigationSatelliteSystem
8. Laserscanningandpointcloud processing
9. Photogrammetry
10. Remotesensing

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESMENT'S METHOD

Grading policy / Evaluation

Marks are from 1 (worst) to 5 (best).

- ☐ 0-50%:   1
- ☐ 51-65%:   2
- ☐ 66-75%:   3
- ☐ 76-85%:   4
- ☐ 86-100%:   5

At the end of the semester, the student is possible to obtain a note on the acquisition of the tasks performed on the exercises on the

basis of a preliminary examination. The topics of the exam will be on the Moodle system. It consists of two parts: theoretical and computer practice.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Charles D. Ghilani; Paul R. Wolf: Elementary Surveying

Teaching materials: SZE Learning system: https://szelearning.sze.hu/

AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL