**ENVIRONMENTAL MAPPING**

Department of Geodesy and Cartography

Faculty of Land Management

**Lecturer Assoc. Prof. Vyacheslav Bogdanets**

**Teaching period (spring semester)**

**Type subject Bachelor**

**ECTS credits 4**

**Assessment written and oral**

**Marking scale 100 point scale**

**Contact hours 30**

**Objective and general description**

The discipline deals with modern mapping methods for environmental objects research and visualization. It forms practical skills in QGIS and other relevant software used as a tool to visualize information from environmental databases, open sources and create “added-value” information product on soil and water resources, agricultural and forest landscapes, and environmental protected areas.

**Lectures:**

1. Role of spatial data and mapping in environmental sciences.

2. Mapping models of environmental systems.

3. Analytical mapping of environmental parameters.

3. Synthetic and complex mapping of environmental systems.

4. Dynamic mapping models of environmental processes.

5. Mapping in environmental monitoring services.

6. Geoportals and environmental resources mapping.

7. Mapping of soil properties and land use.

8. Water resource mapping.

**Laboratory works:**

1. Environmental maps applications.

2. Open access data for environmental mapping.

3. Mapping methods for environmental objects visualization.

4. QGIS as a tool to visualize information from environmental geodatabases.

5. Compiling environmental maps in QGIS.

6. Mapping soil properties and parameters.

7. Mapping land use parameters.

8. Mapping water resources.