Level: master
Course title: GIS application in environmental monitoring and protection
Status: elective
<b>ECTS</b> : 5
Requirements: none
Learning objectives

Ecological planning involves an interdisciplinary approach in solving the problems of conflict between natural resource exploitation and conservation. Geospatial data, GIS, software, models and simulations are used as methods and tools to facilitate the planning process, with the goal of finding sustainable balance between economic, social and natural factors. The goal of this course is to instruct the students in geospatial methods and applications in monitoring and managing protected natural areas and ecosystems. Trough practical examples the students will learn the most important theoretic foundations of ecological planning.

## Learning outcomes

Developed skill of using geoinformatical methods and applications in prevention, mitigation and prognosis of problems related to conservation of environmental resources and in continuous monitoring of environment quality.

## **Syllabus**

Theoretical instruction

The concept of ecological planning and natural system management; Monitoring of environment quality using geospatial methods; Modelling, simulation and prediction in planning environmental protection; Risk analysis; Pollution level evaluation;

Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	