GIS-Course II

Objective

On the basis of GIS-course I further functionalities with focus on working with raster data in ArcGIS will be taught. A second geographical information system (GIS) QGIS will be introduced.

Description

The work with raster data will expand the ability of GIS-data especially in projects where data have a "continuous" nature. (e.g. surface elevation, air temperatures). ArcGIS provides a wide range of powerful functionalities for generating, querying and analyzing these data.
On the first day basic concepts and functions of the work with raster data will be taught including the use of the extension "Spatial Analyst".
On the second day an overview of the general structure of QGIS will be given. Step by step the basic tools will be taught to use this software like ArcGIS to edit, query or analyze spatial data.

This workshop forms the **second part** of a series of two workshops.
The first part – GIS Course I – is offered on **7-9 June 2021**. Participants of the first part will be given priority in the registration procedure.

Conditions

Participants are expected to have a solid undergraduate background in mathematics. Participants missing some of this background are expected to have worked through the following reference prior to the beginning of the course:

Chiang, A.C. and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, Mc Graw-Hill Irwin.

Organizational Information

Language	English
Target group	Doctoral Candidates at all stages and Postdocs from Natural and Life Sciences
Date	Monday-Wednesday, 10-11June 2021, 9:00 – 18:00
Registration	**For registration click here**

Trainers

Dr. Falko Wagner
Institut für Gewässerökologie und Fischereibiologie (IGF), Jena

- Has special expertise in the use of GIS ArcView® for problems of aquatic ecology
- Post-graduate member and scientific assistant, Bauhaus University Weimar
- Lectureship at the University of Applied Sciences Erfurt and Bauhaus University Weimar
- Founder of the Institute for Aquatic Ecology and Fish Biology Jena

Dipl. Geographer
Osama Mustafa
Thüringer Institut für Nachhaltigkeit und Klimaschutz (ThNK GmbH), Jena

- Uses geographical information systems (GIS) for ecological and geomorphological research in polar and high mountain systems
- Dipl.-thesis on »Geomorphological studies and GIS-modelling of alpine permafrost«
- Scientific assistant at Department of Ecology, coordinating field mapping and GIS-work for Antarctic conservation and management
- Co-founder of the Working Group for Regional Climate and Sustainability at University of Jena (in 2009 renamed ThNK GmbH)