



# Summer School: Applied methods for ecosystem services assessments. From theory to practice.

4-9 September 2023  
Lednice, Czech Republic

The summer school will introduce participants to the ecological foundations of ecosystem services to provide highly practical and method-oriented training to evaluate the benefits provided by green and blue infrastructure. Our approach will provide knowledge skills to navigate the conceptual apparatus, and the methodological characteristics of ecosystem services assessments, with an emphasis on quantitative spatially explicit methods, able to be used in the context of spatial, landscape and urban planning.

The summer school will combine theoretical lectures, fieldwork and practical exercises in situ and online. The practical part will take place in the beautiful city of Lednice, in Czechia from 4-9 September 2023 at MENDELU campus, which is located in the middle of the Lednice-Valtice area, which is a UNESCO World Natural and Cultural Heritage Site and one of the most popular tourist destinations in the Czech Republic. During this week participants will enjoy high-quality lectures from local and guest lecturers and develop a practical exercise in the surrounding areas. To successfully finalize the summer school, participants will present their results online between 11-13 September.

## Course objectives

The aim of the summer school is to develop the conceptual foundations and the practical understanding to perform a spatially explicit ecosystem services assessment of green and blue infrastructure.

The summer school is funded by the ERASMUS project. If you would like to extend your summer in an international environment and improve your knowledge and skills, please apply via the contact email. The maximum capacity is 20 participants.

## Organizer

Mendel University in Brno,  
Faculty of Regional Development and International Studies  
Brno, Czech Republic

## Contact:

[ludmila.flokova@mendelu.cz](mailto:ludmila.flokova@mendelu.cz)

Credit info  
3 ECTS

● MENDELU  
● Faculty of Regional  
● Development and  
● International Studies

Mobility programme:  
Erasmus+

# PROGRAMME

## FIRST PART IN LEDNICE

### MONDAY (04/09/2023)

- 09.00 - 11.00 ARRIVAL - of participants and students in Lednice and accommodation
- 09.00 - 11.00 REGISTRATION OF PARTICIPANTS
- 12.00 - 12.30 Introduction of participants and opening of the summer school
- 12.30 - 14.00 Lunch

#### **BLOCK I - Ecological foundations of ecosystem services science**

- 14.00 - 15.30 LECTURE 1: Ecosystem services science, epistemological and ecological foundations (Luis Inostroza)
- 15.30 - 16.00 Coffee break
- 16.00 - 17.30 LECTURE 2: The mission of ecosystem services. The relevance for decision-making and public administration (Luis Inostroza)
- 18.00 - 22.00 Welcome barbeque in the flowering garden of the Faculty of Horticulture, MENDELU

### TUESDAY (05/09/2023)

#### **BLOCK II - Applied methods for ecosystem services assessments**

- 09.00 - 10.30 LECTURE 3: Available data as a necessary basis for the assessment of ecosystem services (Jiří Schneider)
- 10.30 - 11.00 Coffee break
- 11.00 - 12.30 LECTURE 4: Assessment procedures based on biophysical data using GIS analysis - example of Slovak Republic (Peter Mederly)
- 12.30 - 14.00 Lunch
- 14.00 - 15.30 LECTURE 5: Identification of ecosystem services. Navigating the CICESv5.1 (Luis Inostroza)
- 15.30 - 16.00 Coffee break
- 16.00 - 17.30 FIELD WORK - identification of ecosystem services. trip to Lednicko-Valtický UNESCO world heritage area

### WEDNESDAY (06/09/2023)

#### **BLOCK III - Ecosystem services, decision-making, and public administration knowledge-experts II**

- 09.00 - 10.30 ROUNDTABLE/DISCUSSION: field excursion results, (Luis Inostroza, Peter Mederly, Jiří Schneider)
- 10.30 - 11.00 Coffee break
- 11.00 - 12.30 Introduction to the IMECOGIP toolbox
- 12.30 - 14.00 Lunch
- 14.00 - 15.30 Continuation, IMECOGIP toolbox
- 15.30 - 16.00 Coffee break
- 16.00 - 17.30 Continuation, IMECOGIP toolbox

## **THURSDAY (07/09/2023)**

### **BLOCK IV - Teamwork on case studies**

09.00 - 10.30	LECTURE 6: Guest lecture TBC
10.30 - 11.00	Coffee break
11.00 - 12.30	LECTURE 7: Guest lecture TBC
12.30 - 14.00	Lunch
14.00 - 15.30	TEAMWORK
15.30 - 16.00	Coffee break
16.00 - 17.30	TEAMWORK
20:00	Dinner in winecellar

## **FRIDAY (08/09/2023)**

09.00 - 11.30	PRESENTATIONS - Team presentation of ES assessments
11.30 - 12.00	Coffee break
12.00 - 12.30	CLOSING - of the presential part of the summer school
12.30 - 14.00	Lunch
	DEPARTURE of students and participants

## **SECOND PART ON-LINE**

### **MONDAY (11/09/2023)**

HOMEWORK - Preparation of presentation

### **TUESDAY (12/09/2023)**

HOMEWORK - Preparation of presentation  
14.00 - 15.30 CONSULTATION with lecturers

### **WEDNESDAY (13/09/2023)**

14.00 - 16.00 PRESENTATION - of teamwork  
16.15 - 16.45 DISCUSSION, conclusions  
CLOSING - of the summer school



# The IMECOGIP toolbox

IMECOGIP - Implementation of the ecosystem service concept in green infrastructure planning to strengthen the resilience of the Metropole Ruhr and Chinese megacities. IMECOGIP contributes to the applied and practice-oriented implementation of the ecosystem services concept, in spatial and landscape planning. IMECOGIP developed an innovative package of methods to support the planning of green infrastructure whose cornerstone is the "toolbox", an open GIS-based programme package designed to perform spatially explicit assessments of ecosystem services. The IMECOGIP toolbox allows for comprehensive spatially explicit analyses of ecosystem services and their respective marginal analysis. The toolbox is supplemented by ecosystem service profiles as part of a methodological manual, which explains both the scientific principles, the necessary data and framework conditions for their application, as well as programme-related details.

## LECTURERS



Luis Inostroza



Jiří Schneider



Peter Mederly



Malte Bührs

