

Greenfield Management

Code: MK5KOR1S3TX17-EN

ECTS Credit Points: 3

Evaluation: mid-semester grade

Year, Semester: 1st year, 2nd semester

Its prerequisite(s): -

Further courses are built on it: No

Number of teaching hours/week (lecture + practice): 2 + 0

Topics:

The main goal of the course is to introduce the greenfield types and their management as these areas and objects can help to manage the environmental challenges – including climate change induced pressures (e.g. flash floods) and pollution - of urban areas in a sustainable and cost effective way.

Therefore the students get basic knowledge on greenfield systems, their multifunctional values and benefits as well as on anthropogenic impacts on urban green surfaces. By introducing techniques and strategies for improving urban ecological sustainability, along with good practices and weak solutions, students will be able to understand the importance of integrated greenfield, urban and landscape management.

The greenfield management and ecological planning courses side by side provide an integrated approach and knowledge on sustainable urban management.

Literature:

Required:

- John W. Dover, *Green infrastructure, Incorporating plants and enhancing biodiversity in buildings and urban environments*, Routledge Taylor and Francis Group, London and New York, 2015, ISBN 978-0-415-52123-9
- Kimberly Etingoff, *Urban Ecology, Strategies for Green Infrastructure and Land Use*, Apple Academic Press Taylor and Francis Group, Oakville, Canada, 2016, ISBN: 13: 978-1-77188-281-1

Recommended:

- *Green space strategies, a good practice guide*, Commission for the Architecture and Built Environment, UK, London, 2004 pp. 44
- *GreenKeys Manual, A Strategy for urban green space (2008)*, URL: https://www.ioer.de/greenkeys/Greenkeys_Tools/manual.htm
- Harnik, P., *Urban Green, Innovative Parks for Resurgent Cities*, Island Press, Washington DC, 2010, pp. 208
- Palazzo, D. and Steiner, F. R., *Urban Ecological Design, A Process for Regenerative Spaces*, Island Press, Washington DC, 2011, pp. 328

Schedule

1st week Registration week

2nd week:

Lecture: Introduction to greenfield types and functions.

4th week:

Lecture: Urban ecosystems and the city as ecosystem.

6th week:

3rd week:

Lecture: Green roofs and green walls.

5th week:

Lecture: Ecosystem services of various greenfield systems.

7th week:

Lecture: Impacts of green areas on urban climate and air quality.

8th week: 1st drawing week

9th week:

Lecture: Impacts of green areas on human health and well-being.

11th week:

Lecture: Sustainable management and development strategies for greenfield.

13th week:

Lecture: Best practices and weak solutions around the world.

15th week: 2nd drawing week: TEST

Lecture: Impacts of green areas on the urban hydrological cycle. Green solutions.

Visiting the “passive house” of the university.

10th week:

Lecture: Anthropogenic pressures and impacts on green fields

12th week:

Lecture: Green Infrastructure Strategy – a new approach.

14th week:

Lecture: Visiting Debrecen’s different greenfield types.

Requirements

A, for a signature:

Participation at practice is compulsory. Students have to attend practice classes and may not miss more than three times during the semester. In case a student does so, the subject will not be signed and the student must repeat the course. Students cannot make up a practice with another group. Attendance at practice will be recorded by the practice leader. Students write a test at the end of the semester, and present the result of their group work carried out during the course.

Test: Maximum: 100 points (Minimum: 60 points)

B, for a grade:

The grade of the test and the presentation defining the mid-semester grade.

The grade is given according to the following (score/grade): 0 – 59: fail (1); 60 – 69 points: pass (2); 70 – 79 points: satisfactory (3); 80 – 89 points: good (4); 90 – 100 points: excellent (5)