# General Informations:

**Curriculum:** Architecture OTM, Architecture Msc, Interior and Spatial Design

**Name of Course: Lectures on urban landscape**

**Course Code:** EPE222AN

**Semester:** 9th

**Number of Credits:** 5

**Allotment of Hours per Week:** 1/3/0

**Evaluation:** mid-term grade

**Prerequisites:**

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## General Course Description

The program of the course focuses on urban and environmental design and urban planning in a complex approach.

Neptun: Instruction/Subjects/Subject Details/Basic data/Subject description.

## Learning Outcomes

The focus of the course is **to apply the acquired complex knowledge in a larger settlement scale** (settlement, district, block, open spaces/outdoor spaces) with a special emphasis on the development of a conceptual design approach, integration into the built environment, logical and clean connection of functions, finding aesthetic form and **sustainable, green and carbon neutral development**.

Neptun: Instruction/Subjects/Subject Details/Syllabus/Goal of Instruction

## Subject content

This semester the program of the course focuses on **sustainable, green, and carbon-neutral urban and environmental planning**. Students will be introduced to sustainability, green and carbon-neutral urban development, and interventions in general and will reflect on **a defined urban fabric to formulate ideas on the development directions of the area, and then prepare concrete interventions through environmental design in group and individual work (max 3 students/group).**

**The exercise will be carried out in accordance with the course "COMPLEX DESIGN 3" (EPM320AN, with the same planning area delimitation), covering the scales of urban development concept, urban planning, and environmental design.**

Lecture:

The topic of the lectures are based on the followings:

**"Sustainable city"**

"Sustainability is a complex concept, which basically means the ability and readiness to operate effectively in the longer term, beyond the maintenance of the level. Due to the complexity of the city, we talk about ecological, social, economic-financial, technological sustainability in the context of urban development, which requires different, yet mutually considering each other, tools and developments."

Source: Methodological Manual for Sustainable Urban Development Strategy 2021-27 (note: translation of a relevant Hungarian document)

**"Green City"**

"The European Green Capital Award (ECGC) rewards cities that focus on long-term, innovative environmental solutions. Each year, the city that best protects its environment and takes care to create a healthy living environment for its inhabitants is recognised."

Source: https://zoldfovaros.pecs.hu/?page\_id=59&lang=en

**"Carbon Neutral City"**

"Carbon neutrality is a balance between the amount of emitted carbon dioxide and the amount of carbon dioxide removed from the atmosphere and stored in carbon sinks" A carbon neutral city meets carbon neutrality requirements throughout its administrative territory in terms of its operation and development.

Source: <https://www.europarl.europa.eu/news/en/headlines/society/20190926STO62270/what-is->carbon-neutrality-and-how-can-it-be-achieved-by-2050

Practice: Topics

 The topic of the practice part will cover the followings:

1. **Research part**

**Investigation, case stuy**

**Analysis of the design area**

1. **Adaption and Concept part**

Preparation of **Urban development concept**

1. **Design and Planning part**

Preparation of **Urban planning**

Preparation of **Enviromental design**

Laboratory Practice:

 Nor relevant!

**Examination and evaluation system**

*In all cases. Annex 5 of the Statutes of the University of Pécs, the* ***Code of Studies and Examinations (CSE)******of the University of Pécs*** *shall prevail*

[*https://international.pte.hu/sites/international.pte.hu/files/doc/TVSZ%202022\_06\_23\_ENG.pdf*](https://international.pte.hu/sites/international.pte.hu/files/doc/TVSZ%202022_06_23_ENG.pdf)

**Attendance**

In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description..

Method for monitoring attendance: attendance sheet.

**Mid-term assessments, performance evaluation and their ratio in the final grade.**

|  |  |  |
| --- | --- | --- |
| **Type** | **Assessment** | **Ratio in the final grade** |
| 1. ***Research part***
 |  |  |
| *Investigation, case stuy* | *Max 20 points* | *20 %* |
| *Analysis of the design area* | *Max 10 points* | *10 %* |
| 1. ***Adaption and Concept part***
 |  |  |
| *Urban development concept* | *Max 30 points* | *30 %* |
| 1. ***Design and Planning part***
 |  |  |
| *Urban planning* | *Max 10 points* | *10 %* |
| *Enviromental design* | *Max 30 points* | *30 %* |
| *Total* | *Max 100 points* | *100%* |

**Opportunity and procedure for re-takes (PTE TVSz 47§(4))**

The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

**Requirements for the end-of-semester signature**

***Re-takes for the end-of-semester signature*** *(PTE TVSz 50§(2))*

*The specific regulations for grade betterment and re-take must be read and applied according to the general Code of Studies and Examinations. E.g.: all the tests and the records to be submitted can be repeated/improved each at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.*

**Grade calculation as a percentage**

based on the aggregate performance according to the following table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Grade: | 5 | 4 | 3 | 2 | 1 |
|  | A, outstanding work | B, high quality work | C, satisfactory work | D, less than satisfactory work | F, unsatisfactory work |
| Performance in % | 85%-100% | 70%-84% | 55%-69% | 40%-55% | 0-39% |

## Readings and Reference Materials

In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature

Required:

[1.] Lectures by the Instructor, which can be found on NEPTUN MEET STREET/MICROSOFT TEAMS

[2.] Shared articles, papers, book or book chapters

Recommended:

[3.] A. Ritchie, R. Thomas. (2009). Sustainable urban design

[4.] J. C. Moughtin. (2003). Urban design: Street and Square

[5.] Erdi-Lelandais, G. (2014). Understanding the City: Henri Lefebvre and Urban Studies

[6.] Lynch, K. (1990). Image of the City. The MIT Press

[7.] Gehl, J. (1987). Life between Buildings: Using Public Space

[8.] Gehl, J. (2010). Cities for People, Island Pres

[9.] Speck J. (2012). Walkable City, North Point Press

[10.] Montgomery, C. (2013). Happy city, Farrar,Straus and Giroux

## Methodology

The course is based on through collaboration, participation and discussions trough lessons. This is an interaction between Students and Faculty; used the teaching methods like ‘Problem-based learning’ and ‘learning-by-doing’. The communication and work should be reflect a respect for fellow students and their desire to work with regard to noise levels, noxious fumes, etc – from each site of participants. (You will need: sketch paperroll, Rulerscale, sketchbook, pencils, pens, rulers, carton paper for modelling, notebook, internet.)

Students will formulate visions, development concepts and environmental design plans on a settlement/masterplan/block development scale in a pre-defined theme:„sustainable, green or carbon neutral city”. During the work, students will attend lectures where they will acquire the theoretical knowledge which is necessary to carry out the work and will be given samples for development and planning work by carrying out research (max. 2 persons). The groups will then study a delimited area and make development proposals and present the detailed plans of the concept through enviromental design.

Each phase will be discussed at group level during the lesson:

- joint discussion - presentation and discussion of the work done at home, raising any problems that have not yet been identified, analysis of possible responses to the problems identified

- independent reflection on the task

- joint discussion - presenting and discussing the work done in class, raising any problems that have not yet been identified, analysing possible answers to the problems identified.

## Students with Special Needs

Students with a disability and needs to request special accommodations, please, notify the Deans Office. Proper documentation of disability will be required. All attempts to provide an equal learning environment for all will be made.

*Detailed requirements and schedule of the Course*

**Tasks and minimum requirements**

**1. RESEARCH PART**

SUBMISSION: WEEK 08 + IMPROVEMENT LATER

GROUP WORK

Research project focuses on a settlement/urban area from the view of its sustainability, green and carbon neutrality (one group = "one settlement").

**What makes a municipality sustainable, green or carbon neutral? What kind of urban development concepts and strategies have been developed by municipalities in relation to sustainable, green and carbon neutral in operation and development?**

The student research project (group work) will seek answers to the above questions in relation to one specific settlement, if possible, but the exercise can also be carried out in relation to research on three different settlements. The aim of the exercise is to identify and summarize the concepts and strategies used (as mentioned above) and then to adapt ideas to the design location in the next step.

**Content requirement:**

min. 3x 8000 characters (3 topics) + min. 3x3 figures (with list of figures and references)

**Formal requirement:**

To be prepared and submitted as a digital study (pdf) in A3 size, landscape format.

**Note: It is proposed to use the following criteria system for 'Green City' (European Green Cities) topic:**

* 1.climate change: mitigation and adaptation,
* 2.local transport,
* 3.sustainable land use of urban green spaces,
* 4.nature and biodiversity,
* 5. air quality,
* 6.acoustic environment quality,
* 7.waste generation and management,
* 8.water management,
* 9.wastewater management,
* 10.environmental innovation and sustainable employment,
* 11.energy performance,
* 12.integrated environmental management.
*

**Suggested websites on this topic:**

https://ec.europa.eu/environment/europeangreencapital/index\_en.htm

**2. ADAPTATION PART 2**

SUBMISSION: WEEK 08 + IMPROVEMENT LATER

GROUP WORK

Preparation of a sustainability, green or carbon neutral concept for the design area in a group work.

**What development principles could be used to make the defined design area** (by "COMPLEX

DESIGN 3") **a sustainable, green and carbon neutral area?**

**Preparation of a student (group work) proposal for a complex, forward-looking, environmentally sensitive development of a demarcated area.**

Task parts to be prepared:

* Text, diagrams:

a) Presentation of the design area (with photographs, sketches, etc.),

b) Preparation of the “COMPLEX ANALYSIS IN URBAN/SETTLEMENT SCALE 1-2.” studied from “Introduction to urban planning course/ EPE029ANEM” (implementing at least 9 different anylsis aspects from the mentioned 20 ones )

c) exploration of the strengths and problems of the existing situation

d) Formulation of an overall concept for the local conditions (min. 8000 characters)

* Plans:

d) Schematic diagrams, infographics

e) Complex analysis 1:2000-4000 (connected to “text a” part)

f) Development concept presentation 1:2000-4000 (connected to “text c” part)

Formal requirement:

To be prepared and submitted as a digital study (pdf) in A3 size, landscape format.

**3. DESIGN PART:**

WEEK 14

SUBMISSION: INDIVIDUAL WORK BASED ON THE COMMON RESEARCH AND CONCEPT

Preparation of a sustainability, green or carbon neutral plan for the design area in individual work.

**What are the development principles that will make the defined design area** (by "COMPLEX DESIGN 3") **a sustainable, green and carbon neutral area?**

Preparation of a student plan for the complex, forward-looking, environmentally sensitive development of a demarcated area. The assignment will present all the solutions used and a sample area per student in relation to the external spaces.

Task parts to be prepared:

* Text, diagrams:

a) Improvement of all the previously prepared materials (max 5points)

b) Description of the urban planning solution (min. 4000 characters)

c) Description of the environmental design solution (min. 6000 characters)

* Plans:

d) Improvement of all the previously prepared drawings/plans (max 5points)

e) Schematic diagrams, infographics

e) Urban planning

-Zoning/regulation plan 1:4000

g) Environmental design

\_Site plan 1:500

\_Site section (min. 2db) 1:50-200

\_Detail drawings (top view and section detail) 1:20

\_Visualization (min. 3)

\_Verification of compliance with sustainability, green and carbon neutral principles (illustrated by 'exploded' diagrams) (min 3.)

Content elements:

\_Landscape architecture design (design of traffic flow, green areas)

\_Construction of traffic and parking surfaces (including road junctions, traffic junctions with indication of the traffic technology proposal, marking of pavements, curbs, driveways and accessible slopes, paintings, surfaces of motor vehicles, pedestrians, bicycles and parking, pavement plans, the types and materials of paving, the method of paving patterns, the location and design of driveways, driveways, surfaces, moving and fixed baffles, bollards, poles, as well as means of bicycle storage and the construction of public transport stops)

\_ Placement of public objects (including street furniture, drinking fountains and fountains)

\_Equipment placement (including advertising media)

\_Design of public lighting and decorative lighting

\_Location of pavilions, pavilion-like structures, booths (if relevant)

\_Design of catering terraces (if relevant)

Formal requirement:

To be prepared and submitted as a digital study (pdf) in A3 size, landscape format.

## Schedule

|  |
| --- |
| Lecture  |
| week | **Topic** | **Compulsory reading; page number****(from … to …)** | **Required tasks (assignments, tests, etc.)** | **Completion date, due date** |
| 1. | Introduction of the courseTheoretical presentation 01 | Material of the lecture/presentation | \_Investigation, case study \_Analysis of the design area \_Urban development concept | Week 8 |
| 2. |  |  |  |  |
| 3. | Study trip in Pécs city |  | \_Investigation, case study \_Analysis of the design area \_Urban development concept | Week 8 |
| 4. |  |  |  |  |
| 5. | Theoretical presentation 02 | Material of the lecture/presentation | \_Investigation, case study \_Analysis of the design area \_Urban development concept | Week 8 |
| 6. |  |  | \_Investigation, case study \_Analysis of the design area \_Urban development concept |  |
| 7. | Theroretical presentation 03 | Material of the lecture/presentation |  | Week 8 |
| 8. |  |  |  |  |
| 9. | Fall holiday |  |  |  |
| 10. |  |  |  |  |
| 11. | Theroretical presentation 04 | Material of the lecture/presentation | \_Consultation of Urban planning\_Consultation of Enviromental design | Week 14 |
| 12. |  |  |  |  |
| 13. | Theroretical presentation 05 | Material of the lecture/presentation | \_Consultation of Urban planning\_Consultation of Enviromental design | Week 14 |
| 14. |  |  |  |  |
| 15. |  |  |  |  |

|  |
| --- |
| Practice/Laboratory Practice |
| week | **Topic** | **Compulsory reading; page number****(from … to …)** | **Required tasks (assignments, tests, etc.)** | **Completion date, due date** |
| 1. |  |  |  |  |
| 2. | 1. Research partConsultation of the Investigation, case studyConsultation of the analysis of the design area | Material of the lecture/presentation | \_Investigation, case study\_Analysis of the design area | Week 8 |
| 3. | 1. Research partConsultation of the Investigation, case studyConsultation of the analysis of the design area | Material of the lecture/presentation | \_Investigation, case study\_Analysis of the design area | Week 8 |
| 4. | 1. Research partConsultation of the Investigation, case studyConsultation of the analysis of the design area | Material of the lecture/presentation | \_Investigation, case study\_Analysis of the design area | Week 8 |
| 5. | 2. Adaption partConsultation of the urban development concept | Material of the lecture/presentation | \_Urban development concept | Week 8 |
| 6. | 2. Adaption partConsultation of the urban development concept | Material of the lecture/presentation | \_Urban development concept | Week 8 |
| 7. | 2. Adaption partConsultation of the urban development concept | Material of the lecture/presentation | \_Urban development concept | Week 8 |
| 8. | Submission1. Research part2. Adaption part |  | \_Investigation, case study\_Analysis of the design area\_Urban development concept |  |
| 9. | Fall holiday |  |  |  |
| 10. | 3. Design and Planning partConsultation of Urban planningConsultation of Enviromental design | Material of the lecture/presentation | \_Urban planning\_Enviromental design | Week 14 |
| 11. | 3. Design and Planning partConsultation of Urban planningConsultation of Enviromental design | Material of the lecture/presentation | \_Urban planning\_Enviromental design | Week 14 |
| 12. | 3. Design and Planning partConsultation of Urban planningConsultation of Enviromental design | Material of the lecture/presentation | \_Urban planning\_Enviromental design | Week 14 |
| 13. | 3. Design and Planning partConsultation of Urban planningConsultation of Enviromental design | Material of the lecture/presentation | \_Urban planning\_Enviromental design | Week 14 |
| 14. | Submission1. Research part2. Adaption part3. Consultation of Enviromental design |  | \_Investigation, case study\_Analysis of the design area\_Urban development concept \_Urban planning\_Enviromental design |  |
| 15. | Re-Submission1. Research part2. Adaption part3. Consultation of Enviromental design |  | Investigation, case study\_Analysis of the design area\_Urban development concept \_Urban planning\_Enviromental design |  |

 Dr. János GYERGYÁK

 course director

Pécs,01.02.2022