# 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:**

Course director: János GYERGYÁK dr., associate professor

Office: 7624 Hungary, Pécs, Boszorkány str 2. B-332

E-mail: gyergyak.janos@mik.pte.hu

Office telephone: +36 72 503650/23840

Instructors: János GYERGYÁK dr., associate professor

Office: 7624 Hungary Pécs, Boszorkány u. 2. B-332

E-mail: gyergyak.janos@mik.pte.hu

Office telephone: +36 72 503650/23840

**David OJO, assistant teacher**

Office: 7624 Pécs, Boszorkány u. 2. E81

E-mail: ojo.david@mik.pte.hu

Haik Tomajian, doctorate student

Office: 7624 Hungary, Pécs, Boszorkány u. 2. E-81

E-mail: h.tumajian@gmail.com

## 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 and green development**.

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

## Subject content

This semester the program of the course focuses on **sustainable 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 work of minimum 3 - maximum 6 students/group (“workshop”).**

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

Practice: Topics

The topic of the practice part will cover the followings:

1. **Research part**

**Investigation, case study**

**Analysis of the design area**

1. **Concept design part**

Preparation of **Urban development concept**

1. **Final design part**

Preparation of **Urban design**

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 (group task)*** |  |  |
| *Investigation, case stuy* | *Max 10 points* | *20 %* |
| *Analysis of the design area* | *Max 10 points* | *10 %* |
| 1. ***Adaption and Concept part (group task)*** |  |  |
| *Urban development concept* | *Max 20 points* | *20 %* |
| 1. ***Design part (group and individual task)*** |  |  |
| *Urban design* | *Max 20 points* | *15 %* |
| *Environmental design* | *Max 20 points* | *15 %* |
| 1. ***Midterm exam (individual task)*** |  |  |
| *Midterm exam* | *Max 20 points* | *20%* |
| ***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 1: WEEK 05 (+ IMPROVEMENT TILL WEEK 14)

GROUP WORK

**1.1 CASE STUDY**

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

**What makes a municipality sustainable and green? What kind of urban development concepts and strategies have been developed by municipalities in relation to sustainable and green 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 two 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. 10.000 characters (2 topics) + min. 10 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 (European Green Cities) for the topic** (the list is a guideline, which needs to be specified based on the criteria set out in the given annual call):

* 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

**1.2 ANALYSIS OF THE DESIGN AREA**

Carry out a complex analysis of a defined urban area, comprising the design area (min. 8 different aspects - based on a related presentation).

**Content requirement:**

Text, figures:

a) Presentation of the chosen environment (with photographs, sketches, etc.), exploring the history and traditions of the area (min. 5 000 characters)

b) Text summary of the site investigations (min. 8 x 1.000 characters)

c) Evaluation of the investigations (situation analysis, situation assessment) Summary of problems and values (min. 2 x 2,000 characters)

Plans:

(d) Preparation of analysis plans with legend (min. 8 different aspects) 1: 4.000-10.000

e) Evaluation of the analysis (situation analysis, situation assessment) with problem/value map

1: 4.000-10.000

**Formal requirement:**

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

**2. CONCEP DESIGN PART**

SUBMISSION 2: WEEK 9 (+ IMPROVEMENT TILL WEEK 14)

GROUP WORK

Preparation of a sustainable and green concept for the design area in a group work.

**What development principles could be used to make the defined design area sustainable and green area?**

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

**Content requirement:**

Text, figures:

a) Overall conceptual ideas based on the local conditions, assessment of the analysis of the design area, the assessment of the chosen case study settlement (min. 5.000 characters)

Plans:

b) Comprehensive development concept (with development ideas) 1: 8000

c) Illustration of the development concept for the renewal of the building stock, transport, public space system and green space system m1: 5,000

**Formal requirement:**

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

**3. FINAL DESIGN PART:**

SUBMISSION 3: WEEK 14 (+ IMPROVEMENT TILL WEEK 15)

GROUP WORK + INDIVIDUAL WORK

In connection with the sustainable and green development concept of the design area, preparation of a urban design and environmental design plan in group work for the entire area (design area) and, in consultation with the consultants, preparation of environmental design plan for as many small/action areas as the number of students in the group, as follows: **What are the development principles that will make the defined design area a sustainable and green area in urban and environmental scale?**

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 in two scale: urban and environmental scale.

**Content requirement:**

* Text, diagrams:

a) Description of the urban design solutions (min. 5000 characters)

b) Description of the environmental design solutions (min. 5000 characters)

* Plans:

c) Schematic diagrams, infographics

d) Urban design

\_Masterplan – overview 1:8000

showing the entire design area and its immediate surroundings, as well as the boundaries of the detailed environmental design area

(1 drawing sheet)

\_Masterplan – detailed parts (3) 1:2000

showing the entire design area and its immediate surroundings, as well as the boundaries of the detailed environmental environmental design area

(3 drawing sheets)

e) Environmental design (each student in the group have own small/action area in the group)

\_Site plan 1:500 (1 for each small/action areas)

\_Site section (min. 1 for each small/action areas) 1:50-200

\_Detail drawings (min 1. top view and section detail for each small/action areas) 1:20

\_Visualization (min. 2 for each small/action areas)

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

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 course  Theoretical presentation 01 | Material of the lecture/presentation | \_Investigation, case study  \_Analysis of the design area | Week 14 |
| 2. | Group workshop |  |  |  |
| 3. | Theoretical presentation 02 | Material of the lecture/presentation | \_Investigation, case study  \_Analysis of the design area  \_Urban development concept | Week 14 |
| 4. | Group workshop |  |  |  |
| 5. | Theoretical presentation 03 | Material of the lecture/presentation | \_Urban development concept | Week 14 |
| 6. | Group workshop |  |  |  |
| 7. | **National holiday** | Material of the lecture/presentation | \_Urban development concept | Week 14 |
| 8. | **Fall break** |  |  |  |
| 9. | Theoretical presentation 04 | Material of the lecture/presentation | \_Urban development concept  \_Urban design  \_Enviromental design | Week 14 |
| 10. | Group workshop |  |  |  |
| 11. | Group workshop |  |  |  |
| 12. | Theroretical presentation 05 | Material of the lecture/presentation | \_Urban development concept  \_Urban design  \_Enviromental design | Week 14 |
| 13. | Group workshop |  |  |  |
| 14. | **Midterm exam** |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Practice/Laboratory Practice | | | | |
| week | **Topic** | **Compulsory reading; page number**  **(from … to …)** | **Required tasks (assignments, tests, etc.)** | **Completion date, due date** |
| 1. | **1. Research part**  Consultation of the Investigation, case study  Consultation of the analysis of the design area | Material of the lecture/presentation | \_Investigation, case study  \_Analysis of the design area | Week 5 |
| 2. | **1. Research part**  Consultation of the Investigation, case study  Consultation of the analysis of the design area | Material of the lecture/presentation | \_Investigation, case study  \_Analysis of the design area | Week 5 |
| 3. | **1. Research part**  Consultation of the Investigation, case study  Consultation of the analysis of the design area | Material of the lecture/presentation | \_Investigation, case study  \_Analysis of the design area | Week 5 |
| 4. | **1. Research part**  Consultation of the Investigation, case study  Consultation of the analysis of the design area  **2. Concept design part**  Consultation of the urban development concept | Material of the lecture/presentation | \_Investigation, case study  \_Analysis of the design area  \_Urban development concept | Week 5  Week 9 |
| 5. | **1. Research part**  Consultation of the Investigation, case study  Consultation of the analysis of the design area  Submission 1  **2. Concept design part**  Consultation of the urban development concept | Material of the lecture/presentation  Material of the lecture/presentation | \_Investigation, case study  \_Analysis of the design area  \_Urban development concept | Week 5  Week 10 |
| 6. | **2. Concept design part**  Consultation of the urban development concept | Material of the lecture/presentation | \_Urban development concept | Week 10 |
| 7. | **National holiday** |  |  |  |
| 8. | **Fall break** |  |  |  |
| 9. | **2. Concept design part**  Consultation of the urban development concept | Material of the lecture/presentation | \_Urban development concept | Week 10 |
| 10. | **2. Concept design part**  Consultation of the urban development concept  Submission 2  **3. Final design part**  Consultation of Urban and Environmental design | Material of the lecture/presentation  Material of the lecture/presentation | \_Urban development concept  \_Urban design  \_Enviromental design | Week 10  Week 14 |
| 11. | **3. Final design part**  Consultation of Urban and Environmental design | Material of the lecture/presentation | \_Urban design  \_Enviromental design | Week 14 |
| 12. | **3. Final design part**  Consultation of Urban and Environmental design | Material of the lecture/presentation | \_Urban design  \_Enviromental design | Week 14 |
| 13. | **3. Desi Final design part**  Consultation of Urban and Environmental design | Material of the lecture/presentation | \_Urban design  \_Enviromental design | Week 14 |
| 14. | **3. Final design part**  Consultation of Urban and Environmental design  Submission 3 |  | \_Urban design  \_Enviromental design | Week 14 |

Pécs, 27.08.2024

Dr. János GYERGYÁK

course director

associate professor

University of Pécs,

Faculty of Engineering and Information Technology