

# E - LEARNING MANUAL

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# 1. General description about the e- learning structure

E-learning aims to bring the issue of urban green acupuncture to as many people as possible. Its task is to provide important and key information about the forms and methods of implementation of urban green acupuncture in a time-acceptable form.

E-learning is designed to be accessible to a wide range of people, environmental experts, urban planners, landowner architects, other professions or their students. E-learning is designed to be available to as many users as possible, to avoid the needs for special technology or software's, and to provide feedback.

To **increase** interest, people taking the course will be given the opportunity to take a final assessment test which, if passed, will release the informal title of "urban green acupuncture specialist".

The whole e-learning process will use available google platforms, especially google documents.

## Why Google Docs?

- Google Docs is very open. Due to the COVID 19 pandemic, popularity and use have expanded significantly.
- Is need to have an email to use them, but this service is required by Google and does not have to be handled by SALUTE4CE team members.
- The main training part does not require the participant to register. His privacy is not so endangered.
- They are easy to use for both teachers and users.
- The disadvantage for the team is poor records of who uses the information for self-education.

The design of the information structure on the introductory page is shown in Figure 1. It is not even the final version. This will be processed within the own e-learning course.



Figure1: The structure of basic information on the introductory page

## The e-learning course will be divided into two parts:

The **first part** is educational. Those interested in education can study the e-learning Manual. This manual is freely available. No registration is required for his studies.

The **second part** can be completed by those who are interested in obtaining the unofficial title “Urban green acupuncture specialist”. This part ends with the **final test**. To pass the FINAL TEST, it is necessary to register. Sensitive personal data will not be required to log in. The applicant will confirm consent to the use of data for records necessary by the control bodies of the grant provider

The Final TEST will consist of individual work and open questions. IURS expects to be able to handle sustainability for at least 4 years after the end of SALUTE4CE Project.



## 2. E- learning Manual

The e-learning Manual will be divided into chapters and each chapter will be composed of:

- study materials,
- video,
- questions.

Instructions for the study materials (see chapter 2.1) and an example of the structure of the first chapter (see chapter 2.2) can be found below. Main structure is also seen on Fig. 2.

The video should include some interesting elements, an interview, and examples. The video can be made especially for SALUTE4CE project, or can be used as any other inspirational video which is available free for example on YouTube (example of video with pocket park <https://www.youtube.com/watch?v=sJSU5MDvXc0>)



Self -Test questions will be part of the text. The main aim is to do a self-evaluation about understand of all information.



<https://docs.google.com/document/d/xxxxx9eK>



**MANUAL FOR FUTURE GREEN  
ACUPUNCTURE SPECIALISTS**

MODUL 1

Chapter 1 What is green acupuncture)

Study materials

Video

Test evaluation: only closed questions

Chapter 2.....

Study materials

Video

Test evaluation: only closed questions

Chapter 3.....

Study materials

Video

Test evaluation: only closed questions

Fig. 2 structure of e-learning manual

## 2. 1 Study materials

Our joint effort is to create a study material that is elaborated in a didactical, psychological and graphical way so as to enable those interested in the study of urban green acupuncture to penetrate the issue and facilitate independent study.

One of the goals of the prepared study materials, in addition to education in the field of urban green acupuncture, is also to establish a dialogue with students. The text should not be dull, declarative, intended only for memorization, but rather heuristic - exploratory, interactive. It should constantly encourage, activate and force the reader to think. It is the dialogical nature of the text that should become a specific feature of our forthcoming manual. It is a style where the author constantly establishes contact with the readers, addresses them, argues with them, refers to their experiences.

Study materials will not be a typical text book. But need some usually used technics to increase interest and initiated reader to continue of study. In study material will be used boxes, pictograms and other elements is particularly noticeable.

### What should we focus on when writing a text?

The objectives that follow just below the title should define the requirements that the student should achieve after studying the text.



A clear formulation of what the student will be able to know and be able to do using active verbs after studying the relevant chapter.

For example: After studying this chapter, you will be able to identify and analyse..., define..., plan.... The aim of this chapter is for you to be able to orient yourself in..., defining..., explaining... after studying it.

**The written text is presented in short paragraphs.**

**Questions requiring an immediate answer are directly incorporated in the descriptive column (see below).**

**The student is required to be actively involved in the learning process.**

**The study text tries to arouse interest and the need to deal with the topic in more depth.**

By default, the teaching text is divided into chapters and subchapters, which make it easier for students to orient themselves in the text and, with the right choice of headings, its comprehensibility. Chapters and sub-chapters do not have to be the same, but their structure should be uniform. It is advisable to choose a maximum of three levels of headings when designing the structure of the chapter text.

In general, each chapter (or sub-chapter) should have a range that corresponds to the time that the student is, on average, able (and willing) to spend studying in a single session.

#### **Chapter structure:**

- learning objectives, keywords
- study guide - introduction (introductory paragraph)
- own text - curriculum, structured into chapters, subchapters...
- study guide (learning text) - intentional entry of the author into the text, where he talks to students, advises them, encourages them, motivates them to study, refers to their own experiences and opinions (anywhere, it can be placed in any part of the text)
- examples (box)
- exercises, tasks, questions (control, for reflection...)
- summary
- terms to remember (located at the beginning of the chapter)
- solutions and answers (key) to self-corrective (self-assessment) activities



#### **Choice of content of professional text**

The choice of a professional text (issue) is, of course, entirely dependent on you as an expert. However, it is worth noting that in the prepared textbook, students should be given all the necessary sources of information that will be required of them in the final online test.





## Summary

It contains a short and concise summary, closing the whole chapter. This passage include the theoretical potential of the chapter, without details. The student can be referred to other additional sources of information. It is also possible to incorporate the informal approach and authenticity of the author into the summary of the chapter (for example, motivation for further study, appreciation of the student's perseverance).



## References

The list of all used literature is a part of one of the final chapters of the textbook. This register should list all the resources that were used in the creation of the chapters. (each chapter will have separate list) In the chapter text itself, it does not refer to sources of information for the clarity and readability of the teaching text. Please supply the used literature in separate file. For for references will be used HARVARD referencing system see <https://www.citethisforme.com/harvard-referencing>



## Exercises, questions, tasks

When entering exercises, questions and tasks in a chapter, the general principle should apply that each specific task that has been assigned to the text must already have its answer in the chapter. The aim of the answers and solutions is therefore to provide primary feedback, which serves the student to quickly verify the acquired knowledge. In the case of a situation where it is not possible to give, for example, an unambiguous answer to a question, it is possible to use a model solution or to state several possible variants of answers. Of course, this is not about questions to think about. It would be appropriate, for example, to “rule of three”, i.e. to ask the student three questions, while one question is classical (plain text), the other with graphic elements (assignment, connection, assessment of images, etc.) and the third in an entertaining form (quiz, crossword puzzle, etc.).



## Conceptions to remember

The absence of a teacher in e-learning often causes incorrect acquisition of basic concepts. Therefore, "Terms to Remember" is a logical part of every chapter. We include key terms uniformly at the beginning of each chapter.

## If you want to know more (recommended literature)

References to other literature are intended as an extension to the acquired knowledge. We assume that the basic literature is the textbook we are working on.

## Descriptive column

Because the text we are preparing replaces the live lecture, we have to remember important thing - not only the expressive style and language, but also the graphic design and illustrations have to be carefully chosen. Each chapter includes a "Descriptive column" (i.e. the accompanying text of the chapter; the page





of the text is divided into two columns - main and descriptive). The main column is a space for the subject matter, it is the main text content of the prepared study material. A descriptive column is a column on the edge of a page filled with specific content. It contains brief comments (glosses) on the text in the main column (especially on the individual important paragraphs), it can also contain a brief description of figures, tables and the text of tasks on the text, figures and tables.

### Tags in the description column

They are an integral part of our text. They are located in the descriptive column. The logos used from the descriptive column are listed on the following page and will also be listed at the beginning of the text.

## 3. Structure of Modules

### MODULE 1 - Theoretical entrance

Chapter 1 - What is urban green acupuncture? Description of methods of selection of urban green acupuncture spots

Chapter 2 - Soil sealing and soil degradation reduction by application of Urban green acupuncture solution

Chapter 3 - Urban green acupuncture as one of solution for reduction of heat stress in urban space

Chapter 4 - Possibilities of application of urban green acupuncture in reducing problems with rainwater in the urban space

Chapter 5 - Urban green acupuncture for increasing air quality

### MODULE 2- Important point

Chapter 6 - Selection of suitable - sustainable- native - plants - country specific native plants

Chapter 7 - Transnational concept of action plans

Chapter 8 - Participation and communication with stakeholders and end users of urban green acupuncture. Social aspects of urban green acupuncture

### MODULE 3 -Natural based solution - practical part

What are the types of interventions - description - technical solution -which impact carries - advantages - disadvantages



## Annex 1 Example of chapter1

### MODULE 1

responsible to:

#### Chapter 1 Urban Green acupuncture

By studying the chapter, you will get a basic idea of the concept of urban green acupuncture. You will also learn about the importance of greenery in the Urban Area and the challenges facing citizens in the future.

Keywords: *urban green acupuncture, urban area, climate mitigation ...*

Urban space is evolving and undergoing a number of changes in its internal structure. It adapts to the requirements of the population and the needs of society. The city served a defensive function in history. Now it is a place for work, housing and recreation. Cities of today are confronted with climate change. To maintain full functionality, various adaptation measures need to be addressed.

The developed adaptation strategies (add links) contain requirements for the development of green and blue infrastructure, requirements for reducing thermal stress and requirements for reducing air emissions. Other development strategies call for soil protection against pollution or erosion. The need for protection against floods and drought is discussed.

All these requirements often result in investment-intensive actions in larger areas, the preparation of technically and often technologically demanding solutions. However, these solutions are not always implemented due to limited financial resources.

The principle of urban green acupuncture is based on the basic idea. If we focus on more small points, we can achieve improvements of locality conditions with smaller and cheaper solutions.

Green spaces in the urban structure, as mentioned by Kabisch at all,) bring the society a number of benefits - economic, health and ecological. Ecological benefits are, for example, ecosystem services.

In Western European countries, two thirds of the population lives within 500 m of greenery with a minimum size of 2 ha. This information is positive. Nevertheless, it is necessary to pay attention to the development of significantly smaller green areas. The principle of urban green acupuncture focused on the following types of places:

- places that are not maintained, neglected or do not fulfill their function,
- smaller areas - ideally up to 0.2 ha but not more than 1 ha,
- places that bring a negative image to their surroundings or reduce property prices in the area.



#### ■ What is it?

NOTICE – What do you think urban green acupuncture is?

NOTICE – f.e Can you give some specific examples of Urban green acupuncture benefits?



Unmaintained or neglected sites are often located in residential areas as part of the courts. They are corners, abandoned objects, overgrown and unmaintained. Despite the fact that these places are small, they cause concern, people do not like to stay there, they do not like to get closer to those places. People do not want to stop there, for example, for a short rest. Although they are often small localities, their condition has a negative effect on their immediate surroundings. The modification of these places creates positive effects and are a source of many societal services.

Appropriate application of the urban green acupuncture principle provides the following ecosystem, sociological and socio-economic services:

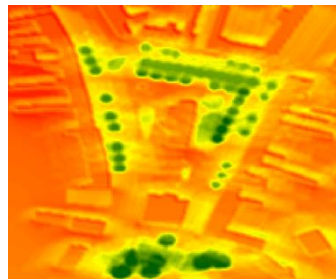
- Reduction of air pollution
- Reduction of heat stress
- Improving rainwater management
- Noise reduction
- Increasing aesthetics
- Increase the feeling of well-being and safety
- Evaluation of real estate in the area (see box 1)
- Ecosystem services

These ecosystem services and their capabilities depend on quality and functionality and usability for the population. Sociological services then reflect the needs identified in Maslow's pyramid of values. We learn more about these properties in Chapters 2 and 3.

The principle of urban green acupuncture affects a number of stakeholders. That is why their participation is absolutely essential. Stakeholders include representatives of municipalities, who are often the organizers of the whole event.

Municipality can create strategic plans and programs in which the urban green acupuncture element appears. Owners of land and buildings within which this activity can take place, or it can be directly part of a new construction such as a green roof.

The public who can passively accept the results of the urban green acupuncture application, or actively participate in its creation or design. Possible result (see Figure 1).



**Figure 1 – Climate fit city**



NOTICE – Who would want to live in a concrete hell?

- Example from practise - BOX





**BOX 1. Measuring the effect the green spaces have on the**



adjacent properties, has become a common practice. Numerous studies have shown that housing and land value, which are adjacent to green spaces, may increase by 5% to 20%. For example, it is known that most people that want to buy a new place to live, are willing to pay more if they close a park.

Fig box - green points in city structure - example - The price per m<sup>2</sup> of apartment is 25 thousand CZK. If we calculate with 5% the prices increase of 1250 CZK.

Example from practise - BOX

### Summary

Urban green acupuncture has many forms. These forms can be from a green tree with a bench in a dense urban area, through green swales around roads and to the complex constructions of green walls and green roofs. Despite the fact that it is a urban green acupuncture, small elements of the blue infrastructure such as cooling mist system, strands and fountains can also be part of the green space. Chapter 3 deals with individual elements in more detail.

Urban green acupuncture can be perceived primarily as the development of green spots in the structure of the city, which can have, for example, positive effects on the reduction of heat islands





**If you want to know more:**

- (1) Kabisch N., Strohbach M., Haase, D., Kronenberg J.. (2016). Urban green space availability in European cities, *Ecological Indicators* Volume 70, pp. 586-596.
- (2) Jansson, M (2014), Green space in compact cities: the benefits and values of urban ecosystem services in planning. *Nordic Journal of Architectural Research* 2, pp. 139-160.
- (3) Haines-Young R., Potschin, M.,. (2008). England's terrestrial ecosystem services and the rationale for an Ecosystem Approach. *Full Technical Report for Defra*. 2008.
- (4) Bowler P. D.E, Buyung-Ali. L, Knight T.M., A.S Pullin.(2010). Urban greening to cool townsand cities: a systematic review of the empirical evidence. *Landscape Urban Plan* 2010, Volume 97, pp.147-155
- (5) Haines-Young, R., Potschin, M. (2010). The links between biodiversity, ecosystem services and human well-being. In D. Raffaelli & C. Frid (Eds.), *Ecosystem Ecology: A New Synthesis* (Ecological Reviews, pp. 110-139). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511750458.007
- (6) Harnik, P. and Welle, B. (2008). Measuring the Economic Value of a City Park System. Retrieved 20th November 2010 from <http://www.tpl.org>.



■ Where can I begin?



Perhaps you are at least a little interested in the issue / it can be difficult for you... What to watch out for... Why the name green urban acupuncture? Think about it and add a few of your own ideas to this chapter.



Questions and tasks:

1. Fill in the missing expressions....
2. Indicate other beneficial impacts of URBAN GREEN ACUPUNCTURE in the urban environment that have not been mentioned in the text.
3. How do you best explain the importance and usefulness of Urban green acupuncture to the general public?
4. Try to defend or refute the following statement: "Urban Green Acupuncture is XXX".

**The key to the questions**

**SPACE FOR YOUR NOTES:**



- What I learned?  
(closed questions -> total at least 5 not up 15 in module)



Test evaluation

Achieved score (95% to success)

Success +



Failure -

