

## MODULE OUTLINE

### 1. GENERAL INFORMATION

<b>SCHOOL</b>	SCHOOL OF APPLIED ARTS AND SUSTAINABLE DESIGN		
<b>PROGRAM COURSE</b>	ENVIRONMENTAL DESIGN		
<b>LEVEL OF STUDY</b>	POST GRADUATE PROGRAM		
<b>MODULE CODE</b>	PSP-53	<b>YEAR OF STUDY</b>	1 <sup>st</sup>
<b>MODULE TITLE</b>	ENVIRONMENTAL URBAN DESIGN AND URBAN PLANNING AND ARRANGEMENT OF OPEN SPACES		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <i>in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits</i>		<b>HOURS</b>	<b>CREDITS</b>
Weekly teaching hours 18-19 hours* 30 weeks		560	20 ECTS
<b>COURSE TYPE</b> Compulsory, Optional, Optional mandatory	Mandatory for Option 2		
<b>PREREQUISITE MODULES:</b>	There are no prerequisites for this unit		
<b>LANGUAGE OF INSTRUCTION AND EXAMS</b>	GREEK		
<b>THE MODULE IS OFFERED TO ERASMUS STUDENTS</b>	No (due to annual duration of the module)		
<b>MODULE WEBSITE (URL)</b>	<a href="https://www.eap.gr/education/postgraduate/annual/environmental-design/topics/#psp53">https://www.eap.gr/education/postgraduate/annual/environmental-design/topics/#psp53</a> Each module has its own space in the Learning Management System of EAP ( <a href="http://study.eap.gr">http://study.eap.gr</a> ), with controlled access (use of code) for students and teaching staff.		

### 2. LEARNING OUTCOMES

<b>Learning Outcomes</b> <ul style="list-style-type: none"> <li>The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail. It is necessary to consult:</li> </ul>
Upon successful completion of PSP53, students will have obtained the following: <ul style="list-style-type: none"> <li>Understanding of how the man-made environment is constructed (architectural solutions and residential units)</li> <li>Understanding of how traditional buildings and settlements were formed, and the problems associated with the transition from traditional settlements to the current development phase</li> <li>Understanding of the connections between individual structures and the wider urban environment, and the environmental impact of construction activities</li> </ul>

- Knowledge of the legal framework, protection agencies, and policies for the urban environment
- Understanding of the general and special categories of open public spaces and ability to propose environmentally oriented solutions
- Understanding of the concept of the landscape in the design of outdoor spaces, and the parameters for large-scale landscape design
- Knowledge of the properties of building materials vis à vis their ecological function, toxicity, and environmental footprint, and understanding of the concepts of re-use and recycling of building materials
- Ability to propose solutions for the conservation of water, the utilization of soft energy and the restoration of ecosystems as part of the function of an urban environment

### **General Competences**

*Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?*

<i>Search for, analysis and synthesis of data and information by the use of appropriate technologies,</i>	<i>Project planning and management</i>
<i>Adapting to new situations</i>	<i>Respect for diversity and multiculturalism</i>
<i>Decision-making</i>	<i>Environmental awareness</i>
<i>Individual/Independent work</i>	<i>Social, professional and ethical responsibility and sensitivity to gender issues</i>
<i>Group/Team work</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Development of free, creative and inductive thinking</i>
<i>Working in an interdisciplinary environment (Other.....citizenship, spiritual freedom, social</i>	<i>.....</i>
<i>Introduction of innovative research</i>	<i>awareness, altruism etc.) ..... </i>

Environmental awareness  
 Development of free, creative and inductive thinking  
 Search for, analysis and synthesis of data and information by the use of appropriate technologies  
 Project planning and management  
 Decision-making  
 Adapting to new situations

### **3. MODULE CONTENT**

The topics discussed in the present Thematic Unit are meant to supplement the knowledge students acquired in the previous two thematic units, and focus on environmental urban design and planning and the environmental design of open spaces and landscapes, aimed at sustainable management of urban spaces and the improvement of living conditions in urban environments. Environmental urban design and planning, together with the principles of environmental building design, is meant to approach the issue of architectural structuring and management of man-made spaces, for sustainable development and environmental protection.

#### 4. TEACHING METHODS--ASSESSMENT

<p><b>MODES OF DELIVERY</b> <i>Face-to-face, in-class lecturing, distance teaching and distance learning etc.</i></p>	<p>Five Distance counseling sessions (ΟΣΣ) during the academic year on weekends.</p>												
<p><b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGY</b> <i>Use of ICT in teaching, Laboratory Education, Communication with students</i></p>	<p>In the meeting and/or in the homework's the following are used:</p> <ul style="list-style-type: none"> <li>- remote meeting tools (cisco Webex, zoom),</li> <li>- presentation software (powerpoint type),</li> <li>- other softwares (e.g. SQLite, Diagram Drawing Tools)</li> </ul> <p>In addition, students use office automation tools, web browsers as well as e-readers for digital books.</p>												
<p><b>MODULE DESIGN</b> <i>Description of teaching techniques, practices and methods: Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity, etc</i></p> <p><i>The study hours for each learning activity as well as the hours of selfdirected study are given following the principles of the ECTS.</i></p>	<table border="1"> <thead> <tr> <th><b>Activity</b></th><th><b>Annual Workload</b></th></tr> </thead> <tbody> <tr> <td>5 OSS (x 4 hours)</td><td>20</td></tr> <tr> <td>Preparation of Assignments (5 assignments * 10 hours)</td><td>200</td></tr> <tr> <td>Examination</td><td>3</td></tr> <tr> <td>Individual study</td><td>337</td></tr> <tr> <td><b>Total module workload (hours)</b></td><td><b>560</b></td></tr> </tbody> </table>	<b>Activity</b>	<b>Annual Workload</b>	5 OSS (x 4 hours)	20	Preparation of Assignments (5 assignments * 10 hours)	200	Examination	3	Individual study	337	<b>Total module workload (hours)</b>	<b>560</b>
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<p><b>STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS</b> <i>Detailed description of the evaluation procedures.</i></p> <p><i>Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other.....etc.</i></p>	<p>Students are assigned to submit the written assignments during the academic year. The average grade of the written assignments, weighted at 30%, is taken into consideration for the calculation of the final grade. The grade of the final or the resit exams shall be weighted at 70 % for the calculation of the final grade.</p> <p>All the criteria are posted, both in each written assignment (in the LMS study.eap.gr), as well as in the general regulation of HOU at: <a href="https://www.eap.gr/education/study-regulations/">https://www.eap.gr/education/study-regulations/</a></p>												

<i>Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students</i>	
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## (5) SUGGESTED BIBLIOGRAPHY

- Suggested bibliography:

VOLUMES PUBLISHED BY THE HOU AND OFFERED TO STUDENTS

Τόμος Α': Περιβαλλοντική Τεχνολογία, ΕΑΠ, Πάτρα 2001. [Volume I: Environmental Technology, HOU, Patras 2001.]

Τόμος Β': Αρχές Οικολογικού Σχεδιασμού, ΕΑΠ, Πάτρα 2004. [Volume II: Principles of Ecological Planning, HOU, Patras 2004.]

### PARALLEL TEXTS

1. Καυκαλάς Γ., Βιτοπούλου Α., Γεμεντζή Γ., Γιαννακού Α., Τασοπούλου Α., Βιώσιμες πόλεις: προσαρμογή και ανθεκτικότητα σε περιόδους κρίσης, Κάλλιπος 2015.

[Kavkalas G., Vitoroulou A., Gemenetzi G., Giannakou A., Tasopoulou A., Sustainable cities: adaptation and resilience in times of crisis, Kallipos 2015.]

2. Αθανασίου Ε., Πόλη και Φύση. Θεωρήσεις της φύσης στον πολεοδομικό σχεδιασμό, Κάλλιπος 2015. [Athanasίου Ε., City and Nature. Considerations of nature in urban planning, Kallipos 2015.]

3. Μωραΐτης Κ., Σχήματα τοπίου: ο σχεδιασμός του τοπίου ως ειδική περίπτωση αρχιτεκτονικής διδακτικής - Ελληνική περίληψη, Κάλλιπος 2015. [Moraitis K., Landscape patterns: landscape planning as a special case of architectural teaching - Greek summary, Kallipos 2015.]

4. Mostafavi, Mohsen, Gareth Doherty (eds.) Ecological Urbanism, Harvard University Graduate School of Design, Lars Müller Publishers, 2009 σελ. 10-53

5. Charles Waldheim, Landscape as Urbanism: A General Theory, Princeton University Press, 2016, σελ. 12-29, 158-175, 185-186 & 195

6. LEED 2009 for Neighborhood Development, Created by the Congress for the New Urbanism, Natural Resources Defense Council, and the U.S. Green Building Council (Updated July 2014)

7. Williams, K., Gupta, R., Hopkins, D., Bramley, G., Payne, C., Gregg, M., ...Musslewhite, C. (2012). Suburban Neighbourhood Adaptation for a Changing Climate (SNACC) final report.

Accompanying Text (for THE PSP53)

Οδηγός Μελέτης για το βιβλίο Gehl, J.H Ζωή ανάμεσα στα κτήρια: Χρησιμοποιώντας το Δημόσιο Χώρο, Πανεπιστημιακές Εκδόσεις Θεσσαλίας 2013. [Study Guide for the book Gehl, J. Life Between Buildings: Using Public Space, Thessaly University Press 2013.]

BOOKS PURCHASED BY THE HOU AND OFFERED TO STUDENTS (ACCOMPANYING BOOKS)

Gehl, J.H Ζωή ανάμεσα στα κτήρια: Χρησιμοποιώντας το Δημόσιο Χώρο, Πανεπιστημιακές Εκδόσεις Θεσσαλίας 2013. [Gehl, J. Life Between Buildings: Using Public Space, Thessaly University Press 2013.]

OTHER TEACHING MATERIAL

1. Rebuild by Design website: students will study, through inactive links, the following Projects:

- a) The BIG U <http://www.rebuildbydesign.org/our-work/all-proposals/winning-projects/big-u>,
- b) Living with the Bay <http://www.rebuildbydesign.org/our-work/all-proposals/winning-projects/ny-living-with-the-bay>,
- c) New Meadowlands <http://www.rebuildbydesign.org/our-work/all-proposals/winning-projects/nj-meadowlands>,
- d) Resist, Delay, Store Discharge <http://www.rebuildbydesign.org/our-work/all-proposals/winning-projects/nj-hudson-river-project-resist-delay-store-discharge>,
- e) Lifelines <http://www.rebuildbydesign.org/our-work/all-proposals/winning-projects/hunts-point-lifelines>  
& f) Living Breakwaters <http://www.rebuildbydesign.org/our-work/all-proposals/winning-projects/ny-living-breakwaters>.

2. Publications, indexes and maps from the website (via link)<https://www.eea.europa.eu/>

3. Video from Projects on the Senseable City Laboratory website <https://senseable.mit.edu/>