

Course title	Urban Gardening				
Course code	GALA2404				
Course type	Lectures and practical application				
Level	Higher Diploma				
Year / Semester	2 nd Year / 4 th Semester				
Teacher's name	Antonia Stelikou				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course purpose and objectives	The course introduces students to the principles and practices of urban gardening, focusing on sustainable, small-scale green spaces in urban environments. Students will learn how to design, implement, and maintain gardens in confined spaces, considering challenges such as limited space, air pollution, and water management. The course highlights sustainable techniques such as vertical gardens, hydroponics, container gardening, and rooftop gardens to enhance urban biodiversity and climate adaptation.				
Learning outcomes	<p>Upon completing the course, students are expected to:</p> <p>Theoretical Learning Objectives:</p> <ol style="list-style-type: none"> Explain the importance of urban green spaces in enhancing environmental quality and urban biodiversity. Recognise the challenges of urban gardening, including limited space, pollution, and water conservation strategies. Understand compact gardening techniques such as container gardening, raised beds, green roofs, and vertical gardens. Identify common pests and diseases in small-scale urban gardens, emphasising eco-friendly solutions. <p>Practical Learning Outcomes:</p> <ol style="list-style-type: none"> Set up a small-scale vegetable garden suitable for urban spaces. Demonstrate proper pruning techniques for small trees and shrubs in urban environments. Construct and maintain a basic vertical or rooftop garden for urban settings. 				
Prerequisites		Required			
Course content	<p>Weeks 1-2: Introduction to Urban Gardening</p> <p>Lectures</p> <ul style="list-style-type: none"> Importance and benefits of urban green spaces Introduction to sustainable urban planting techniques Selection of low-maintenance and climate-resilient plants Indoor and outdoor plants for urban areas <p>Practical:</p> <ul style="list-style-type: none"> Plant identification in Nursery <p>Weeks 3-4: Compact Gardening Methods</p> <p>Lectures</p> <ul style="list-style-type: none"> Container gardening and soil selection Vertical gardens and living walls Green roofs: Benefits, structural considerations, and plant selection Water-efficient gardening techniques 				

Weeks 5-6: Aromatic and Edible Plants in Urban Spaces

Lectures

- Cultivating **herbs and vegetables in confined spaces**
- Hydroponic and aquaponic systems for small-scale food production
- Organic fertilization methods

Practical:

- Creating a vegetable garden

Weeks 7-8: Sustainable Irrigation & Maintenance

Lectures

- Drip irrigation and rainwater collection for urban gardens
- Low-water-use landscaping
- Natural pest control and plant resilience

Practical:

- practice efficient irrigation methods (drip systems, rainwater harvesting).
- Apply low-water-use landscaping techniques in small-scale garden design.

Week 9: Use of Ornamental Plants in Public Spaces

Lectures

- Design and Implementation of Projects in Public Spaces.
- Functionality and Aesthetics of Ornamental Plants in Urban Landscapes.
- Challenges and Solutions for Maintenance in Public Spaces.

Weeks 10: Green Walls and Urban Adaptation

Lectures

- Designing and installing **green walls for building interiors and exteriors**
- Plant selection for **air purification and urban heat reduction**
- Case studies on urban climate adaptation through gardening

Weeks 11-12: Practical Applications

Practical

- Hands-on practice: **Vertical garden setup, rooftop garden maintenance**

Course Breakdown

Week	Teaching Content	Teaching Process
Weeks 1–2	Introduction to Urban Gardening Practical: plant identification in Nursery	Lecture + Practical
Weeks 3–4	Compact Gardening Methods	Lecture
Weeks 5–6	Aromatic and Edible Plants in Urban Spaces Practical: Creating a vegetable garden	Lecture and Practical
Weeks 7–8	Sustainable Irrigation & Maintenance Practice efficient irrigation methods	Lecture and Practical
Week 9	Ornamental Plants in Public Spaces	Lecture

	Week 10	Green Walls and Urban Adaptation	Lecture
	Weeks 11–12	Vertical garden setup Rooftop garden maintenance	Practical
Teaching methodology	<p>Theoretical Instruction: The lectures are delivered through an interactive, student-centered approach, encouraging active participation. Each session begins with a brief introduction to the theoretical concepts, followed by in-depth discussions of key principles. Visual aids, including slides and videos will be used to enhance understanding and stimulate critical thinking. Students will be encouraged to engage with the material through group discussions and problem-solving activities.</p> <p>Practical Instruction: The practical sessions are designed to reinforce theoretical knowledge through hands-on learning, observation, and experimentation. Students engage in field work activities that include setting up a small-scale vegetable garden suitable for urban spaces, pruning small trees and shrubs, vertical garden setup and rooftop garden maintenance and more. These sessions aim to build practical skills by directly connecting practice with theoretical content covered in lectures.</p>		
Bibliography	<p>Greek Bibliography</p> <ul style="list-style-type: none"> Ανανιάδου - Τζημπούλου, Μαρία (2018), Αρχιτεκτονική αστικού τοπίου: Αρχιτεκτονική τοπίου. Σχεδιασμός αστικών χώρων: Κριτική και θεωρία: Σύγχρονες τάσεις σχεδιασμού τοπίου, Ζήτη, ISBN 978-960-456-501-6. Braun, Harald, μετάφραση Σταύρος Παπαδόπουλος (2010), Η διαμόρφωση του κήπου: 400 εντυπωσιακές ιδέες με κείμενο και φωτογραφίες, 1η έκδ., Θεσσαλονίκη, Μαλλιάρης Παιδεία, ISBN 978-960-457-429-2 Hendy, Jenny, μετάφραση Γιάννης Χατζηλάρης (2010), Όμορφος κήπος όλο το χρόνο: Οδηγίες, τεχνικές, συμβουλές, ελάχιστη φροντίδα, εύκολες κατασκευές, 1η έκδ., Αθήνα, Ίριδα, ISBN 978-960-7926-72-2 Kirton, Meredith (2008), Κήποι και βεράντες: Μέσα σε λίγο χρόνο και με απλές κινήσεις μεταμορφώστε την αυλή ή το μπαλκόνι σας!, 1η έκδ., Αθήνα, Modern Times, ISBN 978-960-691-025-8 Αναστάσιος Δάρρας (2010), Κήποι, βεράντες, οροφώκηποι: Ανθοκομία - Κηποτεχνία καλλωπιστικών Φυτών στο αστικό περιβάλλον, Έμβρυο, ISBN 978-960-8002-57-9. <p>English Bibliography</p> <ul style="list-style-type: none"> Solomon, Reggie (2010), I Garden - Urban Style, Betterway Books, ISBN: 978-1440305566. Yokohari, M., Murakami, A., Hara, Y., Tsuchiya, K. (2017), Sustainable Landscape Planning in Selected Urban Regions, ISBN 978-4-431-56445-4.. Fisher, Kathleen (2011). Garden ponds, fountains and waterfalls for your home (Designing - Constructing - Planting). Creative Homeowner. ISBN: 9781580115063 		
Assessment	<ul style="list-style-type: none"> Attendance and participation 10% Individual Written Assignment 20% Practical examination 30% Final written examination 40% 		
	<p>Final written examination includes closed-ended questions (e.g., multiple-choice, matching, true/false) and open-ended questions (e.g., short-answer, essay-type, case studies). The duration of the final written examination is two academic periods and accounts for the 40% of the final grade. Theoretical learning outcomes are also assessed through the individual written assignment on themes related to the theoretical knowledge transmitted during lectures. The individual written assignment accounts for the 20% of the overall grade.</p>		



	<p>Performance to laboratory work (field work) is assessed through a project-based assessment which accounts for the 30% of the overall grade and covers planning, setup, maintenance skills and creativity. The duration of the practical examination is two academic periods.</p> <p>Student performance is evaluated on a scale of 0 to 100, with a minimum overall passing grade of 60. The final grade is calculated as a weighted average of the assessment components disclosed above.</p>
Language	Greek or English