

Course title	Health and Safety in Gardening				
Course code	GALA1201				
Course type	Lectures				
Level	Higher Diploma				
Year / Semester	1 st Year / 2 nd Semester				
Teacher's name	Eve Constantinou/ Antonia Stelikou				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course purpose and objectives	The goal of the course " Health and Safety in Gardening " is to equip the students with the essential knowledge, skills, and competencies needed to recognise, assess, and manage risks in the workplace. The course focuses on the safe use of tools and equipment, protection of workers' health, and accident prevention. Through training on chemical compounds and precautions, ergonomics, and proper chemical management, the students will be able to create safe and healthy working conditions in gardening.				
Learning outcomes	<p>Upon completion of the course, students will be able to:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Explain the basic principles and legislative framework of health and safety applicable to horticulture, with reference to workplace case studies. 2. Identify national and international regulations governing workplace safety in gardening. 3. Recognise the safe use and maintenance of gardening tools and equipment. 4. Comprehend the necessity of implementing appropriate health and safety measures (PPE, safe lifting, ergonomic practices, chemical handling protocols) to reduce significant risks and create a safe working environment. <p>Skills:</p> <ol style="list-style-type: none"> 5. Manage emergency situations in the workplace. 6. Demonstrate correct procedures for the use, storage, application, and disposal of chemical substances, ensuring safety and health in practical gardening contexts. <p>Competencies:</p> <ol style="list-style-type: none"> 7. Promote workplace hygiene by preventing musculoskeletal injuries and other occupational diseases. 8. Collaborate effectively in group-based risk assessments, hazard mapping, and toolbox safety talks to foster a culture of occupational health and safety. 				
Prerequisites			Required		
Course content	<p>Week 1</p> <p>Introduction – The legislative framework for employee health and safety</p>				

Practice:

- Case study analysis of national/EU health & safety laws in gardening/agriculture.

Week 2 - 3

Occupational safety and health hazards in gardening (prevention, health promotion, bloodborne infections, risk of contamination through direct or indirect contact, allergies)

Practice:

- Demonstration of correct use of personal protective equipment (PPE) such as gloves, masks, goggles, boots.
- Simulation: Safe handling of biological materials (soil, plant residues) to reduce infection risk.
- Role play: Identifying and reporting workplace hazards.
- Allergy awareness: Recognition of common allergenic plants and protective measures.

Week 4 - 5

Response to emergencies – Emergency action plan, responsibilities, employer/management responsibilities, employee responsibilities, dealing with dangerous situations.

Practice:

- Mock drill: Fire evacuation procedure in a gardening workplace.
- Demonstration: Safe use of fire extinguishers and first-aid kits.
- Scenario-based training: Assigning roles in an emergency action plan.
- Hands-on training: Basic first aid (bleeding control, burns, insect stings).

Week 6

Accident prevention – Preventing accidents for employee safety, measures to prevent occupational diseases

Practice:

- Case study: Analysis of gardening accident reports and identification of root causes.
- Workshop: Hazard mapping exercise of a garden/field area.
- Practical demo: Safe lifting and carrying techniques.

Week 7

Tools and equipment – Training on proper use, machine protection devices, sharp objects, electricity, maintenance

Practice:

- Hands-on training: Safe handling and maintenance of gardening tools (hand tools, power tools).
- Electrical safety: Proper use of extension cords and protective equipment.

Week 8

Ergonomic/psychosocial risks from the work environment: back pain, injuries, hand health, foot safety, workload

Practice:

- Practical workshop: Correct posture, stretching, and lifting techniques.
- Group discussion: Stress and workload management strategies.

Week 9

Chemicals: Chemical compounds, precautions for mixing materials, exposure to hazardous chemicals, disposal

Practice:

- Demonstration: Safe storage, labeling, and handling of pesticides and fertilizers.
- Practical: Correct use of PPE for chemical application.
- Field simulation: Preparing and disposing of chemical solutions safely.

Week 10

Introduction to ergonomic/psychosocial risks from the work environment: What are ergonomic/psychosocial risks arising from the work environment

Practice:

- Role play: Workplace conflict resolution and stress management strategies.
- Workshop: Risk assessment of psychosocial hazards in a gardening work environment.

Week 11

Chemicals: Chemical reagents, hazard information, symbols and labels on packaging, electrical shock, electrical accidents, apparent measures to address risks

Practice:

- Lab exercise: Reading and interpreting Safety Data Sheets (SDS).
- Hazard symbol identification game/quiz.
- Simulation: Responding to chemical spills and minor electrical accidents.

	<p>Week 12</p> <p>Risk management training: Training for new employees, retraining employees</p> <p>Practice:</p> <ul style="list-style-type: none"> • Group activity: Design a safety induction programme for new gardening employees. • Simulation: Conducting toolbox talks and refresher safety briefings. • Assessment: Students demonstrate correct safety procedures in a mock workplace setting.
<p>Teaching methodology</p>	<p>The teaching is based on active participation, utilising teaching methodologies that promote interaction and application of knowledge. The course includes lectures, group and individual activities, and assignments that involve analysis of topics related to health and safety. The combined use of these methodologies provides comprehensive education to students, enhancing their understanding and skills in the field of health and safety in gardening.</p> <p>Practical sessions use demonstrations, supervised practice, and simulations to develop hands-on skills in workplace safety. Students engage in activities such as PPE use, safe tool handling, chemical management, ergonomic exercises, and emergency drills, applying theory in realistic scenarios while building teamwork and problem-solving skills.</p>
<p>Bibliography</p>	<p>Greek Bibliography</p> <ul style="list-style-type: none"> • Stranks, Jeremy (2017), Μάνατζμεντ ασφάλειας και υγείας των εργαζομένων, Rosili, ISBN 978-618-5131-34-0. • Μαρχαβίλας, Παναγιώτης Κ. (2016), Διαχείριση ασφαλείας και υγιεινής της εργασίας: Τεχνικές και μέθοδοι εκτίμησης της διακινδύνευσης, επικινδυνότητας στην ασφάλεια εργασίας, Τζιόλα, ISBN 978-960-418-633-4. • Ο περί Ασφαλείας και Υγείας στην Εργασία Νόμος του 1996 (Ν. 89(Ι)/1996)-2015 και οι σχετικοί κανονισμοί. <p>English Bibliography</p> <ul style="list-style-type: none"> • Hughes, Phil, and Hughes Liz (2015), Easy guide to health and safety, Routledge Taylor & Francis Group, ISBN: 978-1-138-80834-8 • Kavouras, Ilias G., Chalbot, Marie-Cecile G (2014). Occupational Safety and Health. New York : Nova Science Publishers, Inc. ISBN:9781631176951
<p>Assessment</p>	<ul style="list-style-type: none"> • Attendance and course participation: 10% • Individual assignments/reports related to the nature of the Practical/Lab training 40% • Final Written Examination: 50% <p>Student performance in this course will be evaluated through a combination of continuous and summative assessments. Attendance and active participation in class will contribute 10% to the final grade, reflecting the importance of consistent engagement. A portfolio of individual lab reports compiled from the various practical sessions will account for 40%, assessing students' ability to document their work systematically, demonstrate applied skills, and reflect on their learning throughout the semester. The final written examination, weighted at 50%, will include both closed-ended questions (e.g., multiple-choice, matching, true/false) and open-ended questions (e.g., short-answer, essay-type, case studies). The examination will have a duration of two academic periods and will evaluate students'</p>



	<p>overall understanding of the course content, their ability to synthesize theoretical and practical knowledge, and their critical thinking skills.</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 described above.</p>
Language	Greek or English