# EUROPEAN UNIVERSITY OF LEFKE

# DEPARTMENT OF HORTICULTURE

# PROGRAMME HANDBOOK

**2026**

# PROGRAM INFORMATION

## Program Name and Degree Awarded

Programme Name: Horticulture.

Degree Awarded: Agricultural Engineer

## Duration of Studies

8 Semester

## Total Credits / ECTS

142 credits / 240 ECTS

## Language of Instruction

The language of instruction in our department is English.

## Mission and Vision

### Mission

EUL Department of Horticulture has set a mission to educate agricultural engineers who are environmentally conscious, committed to the principles of sustainable horticulture, capable of accessing and analysing information related to the production of horticultural crops (from field to table), and ready to address the critical challenges facing our world (climate change, water scarcity, soil loss, etc.) by fulfilling all the requirements of the modern era.

### Vision

To give graduates who are well-trained in the field of horticulture, who recognize regional and universal problems, who exhibit sensitive approaches to these problems, and to be a preferred department for students seeking academic programs at national and international level with the education it provides in this field.

## Program Objectives

The purpose of the degree programme is to offer a course of study leading to are recognized degree in preparation for a variety of professions in horticulture. It aims to educate students to serve as extension and production specialist, as well as specialist in horticultural engineering with a strong emphasis on greenhouse, and subtropical and semi-arid crop production. Horticulture graduates are in demand as: Researchers and scientists, Landscape professionals, Horticulture educators,

Greenhouse managers, Orchard or vineyard managers, Crop protection specialists, Nursery managers, and International consultants. General aims of the programme are to:

- Provide students with the theoretical, practical and interdisciplinary training necessary for academic and/or career advancements in horticulture,
- Graduate individuals who are able to keep up with the latest developments and aware of the problems of the era,
- Provide students with necessary skills to be able to work as a part of a team or alone, and additional skills to take part in national and international projects,
- Provide students with skills to critically think, write and speak,
- Provide the students with an appreciation of and respect for social, moral and ethical values to the community.

**Program Learning Outcomes**

The programme outcomes of the Department are:

1) to have the basic scientific foundation necessary for cultivation of horticultural crops mainly vegetables (including summer and winter vegetables, both in greenhouse and open field) and fruits (all kind, including viticulture) and be able to select the most economical techniques in site-specific manner.

2) to have the fundamental knowledge about using computer and internet technologies (IT) for reaching reliable, scientific and practical information in the field of horticulture.

3) to demonstrate a fundamental understanding of the biotic and abiotic environmental factors (climate, soil, water, biodiversity, etc.) affecting plant growth and development and develop strategies to manage them in a sustainable way.

4) to have knowledge both in theory and in practice about most common pests, diseases and weeds of horticultural crops and learn sustainable methods of management.

5) to have theoretical and practical knowledge about laboratory practices and safe use of agricultural tools, together with the basic principles of plant propagation, plant nutrition, irrigation and pruning required for healthy crop cultivation.

6) to have the ability and knowledge to apply organic horticulture and good agricultural practices in farms by following occupational health and environmental protection measures.

7) to have basic information about plant genetics, breeding, biotechnology and postharvest handling of horticultural crops.

8) to have ability and knowledge to conduct studies, interpret and evaluate data, define problems, and suggest solutions based on proof for several problems occur in crop farms and horticultural industries.

9) to have knowledge both in theory and in practice to develop and apply projects considering social responsibilities and develop professional skills with the awareness of the necessity of

lifelong learning in the field of horticulture and to follow the developments in science and technology

10) to have the basic scientific foundation necessary for research, analyse and identify career opportunities in the field of horticulture as well as horticulture related disciplines.

## Curriculum

The programme integrates natural and engineering science elements leading to a four year Bachelor degree. The programme outcomes are designed to reflect both academic and labour-market requirements. The design of the programme supports achievement of the intended learning outcomes. The programme follows a curriculum with 142 credits (240 ECTS) that lasts for 8 semesters (see Table 1 and Table 2). The students successfully completing the program are awarded a Bachelor of Science degree in Agricultural Engineering. EUL Department of Horticulture academic year includes two semesters, namely "Fall" and "Spring", each lasting not less than 14 weeks. The academic calendar to be used in conjunction with the program is determined every year with the University Senate decision. Some classes may be re-offered in the so called "Summer School". The purpose of the Summer School is to offer classes for students who have taken and failed, who haven't taken, or who choose to retake some courses to improve their GPA. Summer School has compressed 7-week duration, where the weekly class hours have been doubled compared to the 14-week regular semester. The regular curriculum of the Horticulture Department is given below (Sem: Semester, T: theory, P: practical, C: Credits).

**Table 1.** The curriculum of the Horticulture Department

| Semesters | Course Code | Course Name | Theory | Practical | Credits | ECTS |
|---|---|---|---|---|---|---|
| 1 | COMN180 | COMPUTER LITERACY | 3 | 0 | 3 | 5 |
| | COMN191 | FOREIGN LANGUAGE ELECTIVE I (ENGLISH) | 3 | 0 | 3 | 3 |
| | COMN109 | MATHEMATICS | 3 | 0 | 3 | 5 |
| | COMN111 | CHEMISTRY | 3 | 0 | 3 | 4 |
| | COMN107 | ECONOMICS | 3 | 0 | 3 | 6 |
| | COMN121 | PHYSICS | 3 | 0 | 3 | 4 |
| | AGRI119 | INTRODUCTION TO HORTICULTURE PROFESSION | 1 | 1 | 1 | 3 |
| 2 | AGRI114 | ECOLOGY | 2 | 2 | 3 | 6 |
| | AGRI152 | BOTANY | 2 | 2 | 3 | 6 |
| | COMN106 | TURKISH | 2 | 0 | 2 | 2 |
| | COMN108 | HISTORY | 2 | 0 | 2 | 2 |
| | COMN192 | FOREIGN LANGUAGE ELECTIVE II (ENGLISH) | 3 | 0 | 3 | 3 |
| | COMN114 | BIOCHEMISTRY | 3 | 0 | 3 | 4 |
| | AGRI102 | INTRODUCTION TO MOLECULAR BIOLOGY AND GENETIC | 3 | 0 | 3 | 7 |
| 3 | AGRI207 | SOIL SCIENCE | 3 | 0 | 3 | 5 |
| | AGRI217 | PHYTOPATHOLOGY | 3 | 0 | 3 | 4 |
| | AGRI251 | VEGETABLE PRODUCTION I | 3 | 0 | 3 | 5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | AGEL01 | TECHNICAL ELECTIVE I | 3 | 0 | 3 | 5 |
| | AGRI255 | BASICS OF FRUIT PRODUCTION | 3 | 0 | 3 | 5 |
| | COMN253 | STATISTICS | 3 | 0 | 3 | 6 |
| **4** | AGRI204 | PLANT AND SOIL LABORATORY | 2 | 2 | 3 | 6 |
| | AGRI216 | PLANT PHYSIOLOGY | 3 | 0 | 3 | 5 |
| | AGRI218 | ENTOMOLOGY | 3 | 0 | 3 | 4 |
| | AGRI226 | PLANT BIOCHEMISTRY | 3 | 0 | 3 | 5 |
| | AGRI228 | FIELD CROPS | 3 | 0 | 3 | 5 |
| | AGRI252 | VEGETABLE PRODUCTION II | 3 | 0 | 3 | 5 |
| **5** | AGRI303 | FIELD PRACTICE I | 2 | 2 | 3 | 6 |
| | AGRI313 | DISEASES OF HORTICULTURAL PLANTS | 2 | 2 | 3 | 5 |
| | AGRI315 | HORTICULTURAL TECHNIQUES | 3 | 0 | 3 | 5 |
| | AGRI351 | IRRIGATION TECHNIQUES | 3 | 0 | 3 | 5 |
| | AGEL02 | TECHNICAL ELECTIVE II | 3 | 0 | 3 | 5 |
| | UFRC01 | UNIVERSITY ELECTIVE I | 3 | 0 | 3 | 4 |
| **6** | AGRI302 | FIELD PRACTICE II | 2 | 2 | 3 | 6 |
| | AGRI306 | TEMPERATE & SUBTROPICAL FRUIT | 3 | 0 | 3 | 5 |
| | AGRI308 | PEST OF HORTICULTURAL PLANTS | 2 | 2 | 3 | 5 |
| | AGRI314 | PLANT NUTRITION | 3 | 0 | 3 | 5 |
| | AGEL03 | TECHNICAL ELECTIVE III | 3 | 0 | 3 | 5 |
| | UFRC02 | UNIVERSITY ELECTIVE II | 3 | 0 | 3 | 4 |
| **7** | AGRI400 | PRACTICAL INTERNSHIP | 0 | 1 | 0 | 1 |
| | AGRI409 | GREENHOUSE TECHNOLOGIES | 3 | 0 | 3 | 5 |
| | AGEL04 | TECHNICAL ELECTIVE IV | 3 | 0 | 3 | 5 |
| | UFRC03 | UNIVERSITY ELECTIVE III | 3 | 0 | 3 | 4 |
| | AGRI471 | PLANT BREEDING | 3 | 0 | 3 | 5 |
| | AGRI481 | CITRICULTURE | 2 | 2 | 3 | 5 |
| | AGEL05 | TECHNICAL ELECTIVE V | 3 | 0 | 3 | 5 |
| **8** | AGEL06 | TECHNICAL ELECTIVE VI | 3 | 0 | 3 | 5 |
| | AGRI404 | VITICULTURE | 3 | 0 | 3 | 5 |
| | AGRI408 | GREENHOUSE PRODUCTIONS | 3 | 0 | 3 | 5 |
| | AGRI418 | POST HARVEST PHYSIOLOGY | 3 | 0 | 3 | 5 |
| | AGRI422 | GRADUATION PROJECT | 3 | 0 | 3 | 5 |
| | AGEL07 | TECHNICAL ELECTIVE VII | 3 | 0 | 3 | 5 |
| | | **TOTAL =** | **117** | **50** | **142** | **240** |

**Table 2.** Elective Pool

| | |
|---|---|
| AGRIXX1 | CTE401 OCCUPATIONAL SAFETY AND HEALTH |
| LEUXX2 | CFE201 LEADERSHIP AND MANAGEMENT |
| AGRI253 | AGRICULTURAL MECHANIZATION |
| AGRI316 | AGRICULTURAL POLICY |
| LEUXX1 | CFE202 ENVIRONMENT AND SUSTAINABLE DEVELOPMENT |
| AGRI402 | AGRICULTURE AND THE ENVIRONMENT |
| AGRIXX2 | AGRI453 SEED TECHNOLOGY |
| AGRI425 | ORGANIC FARMING |
| AGRIXX6 | AGRI491 LANDSCAPE MANAGEMENT |
| AGRIXX3 | AGRI430 WEED SCIENCE |
| AGRIXX7 | AGRI492 FLORICULTURE |
| AGRI452 | HORTICULTURE AND ENVIRONMENT |

## Laboratory and Equipment Capacity (if applicable)

**Table 3.** Laboratory and computer sources

| Laboratory Name | Number of students | Area ($m^2$) |
|---|---|---|
| **Computer Lab. I** | 30 | 42 |
| **Computer Lab. II** | 30 | 42 |
| **Computer Lab. III** | 30 | 42 |
| **Chemistry Laboratory** | 30 | 100 |
| **Physics Laboratory** | 30 | 75 |
| **Horticulture Laboratory** | 20 | 100 |

## Career Opportunities

Graduates of the Department of Horticulture, European University of Lefke are well-prepared for diverse career paths in the agricultural and horticultural sectors. The program equips students with theoretical knowledge, practical skills, and research experience, enabling them to address real-world challenges in crop production, sustainable farming, and postharvest management. Career opportunities for graduates include:

- **Public Sector and Government Agencies.** Serving as agricultural engineers, inspectors, and policy advisors in ministries of agriculture, food and rural affairs departments, municipal environmental units, and other state institutions responsible for agricultural development, food security, and environmental protection.
- **Horticultural Engineers and Specialists.** Working in the design, management, and improvement of greenhouse systems, orchards, vineyards, and subtropical crop production units.

- **Research and Development Experts.** Conducting scientific studies in universities, research institutes, and private companies on plant physiology, biotechnology, crop protection, and postharvest technologies.
- **Extension and Advisory Professionals.** Providing technical guidance to farmers, agricultural cooperatives, and rural communities on sustainable production, integrated pest management, irrigation, and plant nutrition practices.
- **Greenhouse and Nursery Managers.** Leading commercial horticultural enterprises specializing in vegetables, fruits, ornamentals, and seedlings.
- **Crop Protection and Food Safety Specialists.** Ensuring safe, high-quality production through pest, disease, and weed management, as well as implementing Good Agricultural Practices (GAP) and organic farming principles.
- **Postharvest and Supply Chain Managers.** Engaging in storage, packaging, processing, and distribution of fruits and vegetables in line with global market standards.
- **International Consultants and Project Managers.** Working in development projects, non-governmental organizations (NGOs), or international agencies that focus on food security, climate-smart agriculture, and rural development.

In addition, graduates may pursue postgraduate education (MSc and PhD degrees) in horticulture or related disciplines, thereby advancing toward academic and research careers. Entrepreneurial graduates are also encouraged to establish their own horticultural enterprises, benefiting from the program's strong emphasis on innovation and practical training.

**Contact Information**

*Head of Department*

Assoc. Prof. Dr. İbrahim Kahramanoğlu - ikahramanoglu@eul.edu.tr

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 114 | Ecology | Compulsory | 2 | 2 | 0 | 3 | 8 | Monday / 12.00-14.00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 2nd Semester | **Frequency:** | each spring term | **Planned class size:** | 30 |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Turgut Alas | **Office Hours Schedule:** | re-announced each semester |
| **E-mail** | talas@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2576 | **Office/Room No:** | AS240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

**Course Objectives:**

Purpose of the course can be summerized as below:
1) Learning basic principles of ecology and agroecology
2) Provide students with an understanding of the ecosystems and roles of biodiversity in life
3) Provide students with a knowledge of energy, organisms, food web and nutrient cycles

**Learning Outcomes:**

1. Ecology and biodiversity.
2. Biomes and Ecosystems.
3. Energy, organisms, food web and nutrrient cycles.
4. Population ecology and Agroecology concepts

**Textbooks and/or References:**

| | |
|---|---|
| 1 | Odum, E.P. (1971). Fundamentals of Ecology (Third Edition). W.B. Saunders Company, 574p. ISBN: 0-7216-6941-7 |
| 2 | Gliessmann, S.R. (2015). Agroecology: The ecology of sustainable food systems (Third Edition). CRC Press, 371p. |
| 3 | Keleş, R. and Harmancı, C. (2002). Çevrebilim (4. baskı). Imge Kitabevi Yayınları, 410p. ISBN: 975-533-043-7 |
| 4 | |
| 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 02.02.26 | Critical Definitions | 1, 2 |
| Week 2 | 09.02.26 | History of Ecology | 1, 2 |
| Week 3 | 16.02.26 | Abiotic and Biotic Factors | 1, 2, 3 |
| Week 4 | 23.02.26 | Abiotic and Biotic Factors | 1, 2, 3 |
| Week 5 | 02.03.26 | Binomial Nomenclature | 1, 2 |
| Week 6 | 09.03.26 | Characteristics of Living Organisms | 1, 2 |
| Week 7 | 16.03.26 | Biodiveristy | 1,2 |
| Week 8 | 23.03.26 | Biomes and Ecosystems | 1, 2 |
| Week 9 | 30.03.26 | Energy and Organisms | 1, 2 |
| Week 10 | | ***Midterm Exam*** | |
| Week 11 | 13.04.26 | Energy and Organisms | 1, 2 |
| Week 12 | 20.04.26 | Nutrient Cycles | 1, 2 |
| Week 13 | 27.04.26 | Agroecology | 1, 2, 3 |
| Week 14 | 04.05.26 | Human Impact on the Environment | 1, 2, 3 |
| Week 15 | 11.05.26 | Air, Soil, Water Pollution | 1, 2 |
| Week 16 | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | 16-25 May 2026 | 50 | |
| Semester Evaluation | | | 50 | |
| Midterm(s) | 1 | 04-12 April 2026 | 30 | 80 |
| Quiz(zes) | 0 | | 0 | 0 |
| Project(s) | 0 | | 0 | 0 |
| Homework(s) | 1 | | 20 | 20 |
| Laboratory | 0 | | 0 | 0 |
| Attendance | 0 | | 0 | 0 |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 1 | 4 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 35 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 70 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **257** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **8.57** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 119 | Introduction to Horticulture Profession | Compulsory | 1 | 1 | 0 | 1 | 3 | Friday 09:00-10:00 |
| Prerequisite: | n/a | Prerequisite to: | n/a | | | | | |
| Semester: | 1st Semester | Frequency: | each fall term | | | Planned class size: | | 30 students |
| Teaching methods: | Lectures, field practices, assignment and discussions | | | | | Duration: | | 1 semester |

| | | | |
|---|---|---|---|
| Course Lecturer: | Assist. Prof. Dr. Murat Helvacı | Office Hours Schedule: | Monday 14:00-17:00/Tuesday 14:00-17:00/Wednesday 09:00-12:00 & 14:00-17:00/Thursday 09:00-12:00 |
| E-mail | mhelvaci@eul.edu.tr | | |
| Phone | 0 542 850 0336 | Office/Room No: | AS 301 |
| Teaching Assistant: | | Phone: | |
| E-mail: | | Office/Room No: | |

| | |
|---|---|
| Course Objectives: | Introduction to Horticultural Plants, explaining their biological characteristics, giving information about ecological requirements and basic physiological mechanisms, giving general information about reproduction, propagation, and harvesting process |
| Learning Outcomes: | Information on the classification of horticultural crops, their place in the world and national economy, the physiology and biology of horticultural crops, the points to be considered in vegetable and fruit ornamental plants and vineyard plants, ecological demands, cultural processes, preservation and preparation for the market. |

| Programme Outcome Relations | | | |
|---|---|---|---|
| PO1: 5<br>PO2: 1<br>PO3: 4<br>PO4: 3<br>PO5: 4<br>PO6: 1 | PO7: 1<br>PO8: 2<br>PO9: 1<br>PO10: 1 | (1) Strongly disagree;<br>(2) Disagree;<br>(3) Neither agree nor disagree;<br>(4) Agree;<br>(5) Strongly agree. | |

| Textbooks and/or References: | | |
|---|---|---|
| | 1 | Pandey, P. (2025). Fundamentals of Horticulture. AG Publishing House. |
| | 2 | Rather A.M.U.D., Hajam, M. A., Bhat, M. S. A., & Malik, M. I. (2023). Horticulture: principles and practices. Academic Guru Publishing House. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 26.09.2025 | Introduction to Horticulture | 1, 2 |
| Week 2 | 03.10.2025 | Horticultural Plants and Classification | 1, 2 |
| Week 3 | 10.10.2025 | Horticultural plants and products for human nutrition, health benefits and classification in respect of edible parts | 1, 2 |
| Week 4 | 17.10.2025 | Factors Affecting Pollination, Fruit Formation and Classification | 1, 2 |
| Week 5 | 24.10.2025 | Juvenility and Bud Differentiation | 1, 2 |
| Week 6 | 31.10.2025 | Ecological Requirements of Horticultural Plants I-II | 1, 2 |
| Week 7 | 07.11.2025 | Fertilizers and Fertilization Techniques | 1,2 |
| Week 8 | ***08-16 Nov. 2025*** | ***Midterm(s)*** | |
| Week 9 | 21.11.2025 | Physiology in Horticultural Plants | 1,2 |
| Week 10 | 28.11.2025 | Propagation of Horticultural Plants I-II | 1,2 |
| Week 11 | 05.12.2025 | Soil Structure and Importance of Soil | 1, 2 |
| Week 12 | 12.12.2025 | Establishing of Orchard and Vineyard - Planting Systems | 1, 2 |
| Week 13 | 19.12.2025 | Establishing of Vegetable Garden | 1.2-1 |
| Week 14 | 26.12.2025 | Annual Cultural Practices in Horticultural Plants | 2-4, 2-5, 2-6 |
| Week 15 | 02.01.2026 | Pest Management | 1,2 |
| Week 16 | ***03-11 Jan. 2026*** | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | 03-11 January 2026 | 60 | |
| Semester Evaluation | | | 40 | |
| Midterm(s) | 1 | 08-16 November 2025 | 40 | 80 |
| Quiz(zes) | | | | |
| Project(s) | | | | |
| Homework(s) | | | | |
| Laboratory | | | | |
| Attendance | | | | |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction: English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 14 | Homework | 0 | 0 |
| TLH Self Study | 14 | 28 | Mid-term Exam (ME) | 1 | 8 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 10 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 1 | 3 | Final Exam (FE) | 1 | 10 |
| AH preparation self study | 1 | 7 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **90** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **3.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 152 | Botany | Compulsory | 2 | 2 | 0 | 3 | 8 | Wednesday 12:00-14:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 2nd Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Murat Helvacı | **Office Hours** | Monday 14:00-17:00, Tuesday 09:00-12:00, Wednesday |
| **E-mail** | mhelvaci@eul.edu.tr | **Schedule:** | 09:00-11:00;15:00-17:00, Friday 09:00-12:00;14:00-17:00 |
| **Phone** | 0 542 850 0336 | **Office/Room No:** | AS 240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | To give the informations about plant cell, vascular system of plants, photosynthesis, growth and development of plants, plant growth regulators, respiration, primitive plants, monocot and dicot plants, morphological characteristics of plants, important plant families, their classifications and ecologies. |
| **Learning Outcomes:** | Learning outcomes of the lecture can be summerized as below:<br>1- Define botany and identify characteristics common to all plants<br>2- Describe the complexity of plant cell structure and function<br>3- Compare and contrast the structure and function of different groups of plants<br>4- Describe various systems of classification and basic properties of organisms found in each Kingdom and classify common plants based on the binomial system of nomenclature<br>5- Identify and describe the process and individual reactions of photosynthesis and respiration<br>6- Describe the basic principles of plant production |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| **PO1: 3**<br>**PO2: 1**<br>**PO3: 3**<br>**PO4: 2**<br>**PO5: 5**<br>**PO6: 1** | **PO7: 4**<br>**PO8: 2**<br>**PO9: 1**<br>**PO10: 1** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** | |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Byng, J. W. (2014). The Flowering Plants Handbook: A practical guide to families and genera of the world. Plant Gateway Ltd.. |
| | 2 | Jose, S. and Clennett C. (2019). Trees, Leaves, Flowers and Seeds (1st Edition). Darling Kindersley Publishing, 192p. |
| | 3 | Bahadur, B., Rajam, M. V., Sahijram, L., & Krishnamurthy, K. V. (Eds.). (2015). Plant biology and biotechnology: Volume I: Plant diversity, organization, function and improvement (No. 11603). Springer India. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 04.02.2026 | Plant Structures | 3, 195 |
| **Week 2** | 11.02.2026 | The Plant Cell and Its Molecular Components | 3, 50 |
| **Week 3** | 18.02.2026 | Photosynthesis and Respiration | 3, 262/3, 295 |
| **Week 4** | 25.02.2026 | Flowers | 2, 64 |
| **Week 5** | 04.03.2026 | Reproduction in Flowering Plants | 2, 68 |
| **Week 6** | 11.03.2026 | Angiosperms and Gymnosperms | 2, 10 |
| **Week 7** | 18.03.2026 | Differences between botany of fruit and vegetables | 2, 134 |
| **Week 8** | 25.03.2026 | C3, C4 and CAM Plants | 2,12 |
| **Week 9** | 01.04.2026 | Leaf Anatomy and Morphology | 1,23 |
| **Week 10** | ***04-12 April 2026*** | ***Midterm(s)*** | |
| **Week 11** | 15.04.2026 | Meiosis and Fertilization | 2,68 |
| **Week 12** | 22.04.2026 | Root Anatomy | 1, 12 |
| **Week 13** | 29.04.2026 | Plant Taxonomy | 2, 10 |
| **Week 14** | 06.05.2026 | Seedless Plants | 2, 12 |
| **Week 13** | 13.05.2026 | Plant Tissues | 1, 8 |
| **Week 15** | ***16-25 May 2026*** | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 16-25 May 2026 | 50 | 100 |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 04-12 April 2026 | 40 | 80 |
| **Quiz(zes)** | | | | |
| **Project(s)** | | | | |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | | | | |
| **Attendance** | | | | |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 6 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 72 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **240** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **8.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI204 | Plant and Soil Laboratory | Compulsory | 2 | 0 | 2 | 3 | 6 | Tuesday 12:00-13:50, AS119<br>Friday 11:00-12:50, Lab |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 4th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, laboratory exercises, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assoc. Prof. Dr. İbrahim Kahramanoğlu | **Office Hours Schedule:** | Monday 10:00-11:50, Wednesday 10:00-11:50 |
| **E-mail** | ikahramanoglu@eul.edu.tr | | |
| **Phone** | +90 392 660 2000 - 2845 | **Office/Room No:** | AS 238 & Institute 203 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Objectives of this course are making students familiar with the basic principles of soil and plant sampling techniques, introducing to various measurement systems and equipment, and with the determination of basis soil properties, nutrient element contents of soil and plant samples, extended examples of various laboratory calculations. The expected outcome is a better appreciation of soil and plant analyses in the assessment of soil fertility and nutritional status of crop plants for more efficient fertilizer applications. |
| **Learning Outcomes:** | Purpose of the course can be summerized as below:<br>1) Learning basic principles of laboratory procedures, equipments and instruments for measurements<br>2) Provide students with an understanding of the importance of plant and soil analysis (including salinity)<br>3) Provide students with a knowledge of how to collect plant (including fruit and leaf) and soil samples<br>4) Learning the basic principles and guideliness of plant and soil analysis and how to read the results<br>5) Provide students with a knowledge about how to perform fruit quality analysis, chlorophyll and carotenoids, acidity, phenolics and etc. |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| PO1: 4 | PO6: 4 | (1): Strongly disagree; |
| PO2: 2 | PO7: 3 | (2): Disagree; |
| PO3: 3 | PO8: 4 | (3) Neither agree nor disagree; |
| PO4: 1 | PO9: 1 | (4) Agree; |
| PO5: 5 | PO10: 1 | (5) Strongly agree. |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Estefan, G., Sommer, R. and Ryan, C. (2013). Methods of Soil, Plant and Water Analysis: A manuel for the west Asia and North Africa regions (third Edition). ICARDA, 243p. |
| | 2 | Westerman, R.L. (1990). Soil· Testing and Plant Analysis (Third Edition). Soil Science Society of America, Inc. Madison, Wisconsin, USA, 757p. |
| | 3 | Jones, J.B. (2001). Laboratory Guide for Conducting Soil Tests and Plant Analysis (1st Edition). CRC Press, ISBN 9780849302060 |
| | 4 | Kalra, Y. (1997). Handbook of reference methods for plant analysis. CRC press. |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 03/02/2026 | Laboratory Procedures and Equipments | 1, 2, 3 |
| **Week 2** | 10/02/2026 | Instruments for Measurements and the Soil | 1, 2, 3 |
| **Week 3** | 17/02/2026 | Soil Sampling and Some Tests | 1, 2, 3 |
| **Week 4** | 24/02/2026 | Soil pH and Some Chemical Analysis | 1, 2, 3 |
| **Week 5** | 03/03/2026 | Some Chemical Analysis (continue) | 1, 2, 3 |
| **Week 6** | 10/03/2026 | Salinity in Irrigation Water | 1, 2, 3 |
| **Week 7** | 17/03/2026 | Plant Sampling and Some Analysis | 1, 2, 3 |
| **Week 8** | 24/03/2026 | Chlorophylls and Carotenoids Content Measurement | 1, 2, 3 |
| **Week 9** | 31/03/2026 | Fruit Quality Analysis | 1, 2, 3 |
| **Week 10** | **04-12.04.2026** | **Mid-term Exam** | |
| **Week 11** | 14/04/2026 | Acidity and Some Postharvest Storage Quality Parameters | 3, 4 |
| **Week 12** | 21/04/2026 | UPOV Criterias | 3, 4 |
| **Week 13** | 28/04/2026 | Ascorbic Acid Measurement | 4 |
| **Week 14** | 05/05/2026 | Total Phenolics and Flavonoids Measurement | 4 |
| **Week 15** | 12/05/2026 | Free radicals and Antioxidant Activity | 4 |
| **Week 16** | **16-25.05.2026** | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | ***16-25.05.2026*** | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | ***04-12.04.2026*** | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 4 |
| TLH Self Study | 14 | 56 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 44 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **180** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **6.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| **AGRI 207** | **Soil Science** | Compulsory | 3 | 0 | 0 | 3 | 5 | *Thursday, 09.00-11.50, AS112* |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 3rd Semester | **Frequency:** | each fall term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assoc. Prof. Dr. İbrahim Kahramanoğlu | **Office Hours Schedule:** | *Monday 10:00-12:00; Wednesday 10:00-12:00* |
| **E-mail** | ikahramanoglu@eul.edu.tr | | |
| **Phone** | +90 392 660 2000 / 2845 | **Office/Room No:** | *Institue office* |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | This course emphasizes the complex nature of the soils as a medium of plant production and in a broader sense as a life supporting system with respect to their formation, basic functions, use, conservation and limitations. Morphological, mineralogical, chemical, physical and biological properties of soils will be elaborated in some detail with respect to their production potentials. The expected outcome is a broader view of soils in relation to soil fertility and to their value as a natural resource. |
| **Learning Outcomes:** | Purpose of the course can be summerized as below:<br>1) Learn the basic principles of soil science and understand the soil as a medium for plant growth;<br>2) Have knowledge about soil forming, soil properties and soil characteristics (both chemical and physical);<br>3) Understand the relationship between the soil, water and plant nutrients;<br>4) Have the ability to select suitable crops for different soil and define best way for soil management and plant nutrition. |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| | PO1: 4 | PO6: 2 | (1): Strongly disagree; |
| | PO2: 1 | PO7: 1 | (2): Disagree; |
| | PO3: 5 | PO8: 2 | (3) Neither agree nor disagree; |
| | PO4: 2 | PO9: 1 | (4) Agree; |
| | PO5: 4 | PO10: 2 | (5) Strongly agree. |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | USDA (2014). Keys to Soil Taxonomy (by Soil Survey Staff). Twelfth Edition, 360p. |
| | 2 | Lal, R. and Stewart, B.A. (2018). Soil and Climate. 1st Edition, CRC Press, 434p. ISBN 978149878365 |
| | 3 | Lal, R. and Stewart, B.A. (2013). Principles of Sustainable Soil Management in Agroecosystems. 1st Edition, CRC Press, 568p. ISBN 9781466513464 |
| | 4 | Tan, K.H. (2009). Environmental Soil Science. 3rd Edition. 600p. ISBN 9781420072808 |
| | 5 | Mukherjee, S. (2022). Current topics in soil science: an environmental approach. Springer Nature. |
| | 6 | Sparks, D. L. (2019). Fundamentals of soil chemistry. Encyclopedia of Water: Science, Technology, and Society, 1-11. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 25/09/2025 | Introduction: Principles of Soil Science | 1, 2, 3 |
| **Week 2** | 02/10/2025 | Soil Forming: Factors and Process | 1, 2 |
| **Week 3** | 09/10/2025 | Important Soil Properties: Soil physical properties | 1, 2, 3 |
| **Week 4** | 16/10/2025 | Important Soil Properties: Soil physical properties (continue) | 1, 2 |
| **Week 5** | 23/10/2025 | Important Soil Properties: Soil chemical properties | 1, 2 |
| **Week 6** | 30/10/2025 | Soil Water Management | 1, 2, 4 |
| **Week 7** | 06/11/2025 | Soil pH and Alteration | 1, 2 |
| **Week 8** | ***08 - 16/11/2025*** | ***Mid-term exam*** | |
| **Week 9** | 20/11/2025 | Essential plant nutrients and fertilizers | 1, 2 |
| **Week 10** | 27/11/2025 | Soil Testing and Plant Analysis | 1, 2, 3 |
| **Week 11** | 04/12/2025 | Erosion and Soil Degradation | 1, 2 |
| **Week 12** | 11/12/2025 | Tillage and compaction management | 2, 3, 4 |
| **Week 13** | 18/12/2025 | Soil air and soil temperature | 1, 3, 4 |
| **Week 14** | 25/12/2025 | Soil organisms and soil ecology & Soil health | 1, 3, 4 |
| **Week 15** | ***01/01/2026*** | ***Holiday*** | |
| **Week 16** | ***03 - 11/01/2026*** | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 03 - 11/01/2026 | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 08 - 16/11/2025 | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** *** **Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 4 |
| TLH Self Study | 14 | 42 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 4 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 4 | 8 | Presentation | 0 | 0 |
| L preparation self study | 4 | 6 | Project | 0 | 0 |
| Applied Hours (AH) | 10 | 20 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 28 | FE preparation self study | 1 | 6 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 216 | Plant Physiology | Compulsory | 3 | 0 | 0 | 3 | 5 | Thuesday 9:00 - 11:50 AM |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | | n/a | |
| **Semester:** | 8th Semester | **Frequency:** | each spring term | **Planned class size:** | 20 students |
| **Teaching methods:** | Lectures, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Prof. Dr. Mehmet Atilla Aşkın | **Office Hours Schedule:** | Tuesday 14:00 -15:30 |
| **E-mail** | maskin@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2502 / 0533 8751224 | **Office/Room No:** | Dean office |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Plant physiology is a branch of biological science that studies plant function that means what is going on in plants that accounts for their being alive. The scope of plant physiology is a science is very broad, ranging from biophysics and molecular genetics to environmental physiology and agronomy. Photosynthetic metabolism not only provides carbon and energy for the growing plant, but the determines the capacity of the plant to withstand environmental stress. The growth and development of roots, stems, leaves, and flowers are regulated by a host of interacting factors such as light, temperature, hormones, nutrition and carbon metabolism. Plant physiology is also very active field of study and new revelations about how |
| **Learning Outcomes:** | 1. Learn the basic principles of Plant Physiology<br>2. Have knowledge about plant cell organelles<br>3. Understand Plant cytoskeleton<br>4. Learn plant cell and water relationship |

| | | | |
|---|---|---|---|
| **Programme Outcome Relations** | **PO1: 5**<br>**PO2: 5**<br>**PO3: 3**<br>**PO4:4**<br>**PO5: 5**<br>**PO6: 4** | **PO7: 5**<br>**PO8: 4**<br>**PO9: 3**<br>**PO10: 5** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Plant Physiology, L. Taiz and E. Zeiger, 2003, Sinauer Associates, ISBN: 0878938230, 690 pages. |
| | 2 | Introduction to Plant Physiology, W. G. Hopkins and N. P. A. Hüner, 2009, John Wiley & Sons, Inc., ISBN: 9780470247662 |
| | 3 | Handbook of Plant and Crop Physiology, M. Pessarakli, 2002, Marcel Dekker, Inc., ISBN: 0-8247-0546-7 |
| | 4 | Physicochemical and Environmental Plant Physiology, P.S. Nobel, 2009, Elsevier Inc., ISBN: 978-0-12-374143-1 |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 03.02.26 | Introduction to Plant Pysiology | 1, 2, 3, 4 |
| **Week 2** | 10.02.26 | Plant Cell | 1, 2, 3, 4 |
| **Week 3** | 17.02.26 | Plant-Water Relations | 1,2,3,4 |
| **Week 4** | 24.02.26 | Mineral Nutrition | 1, 2, 3, 4 |
| **Week 5** | 03.03.26 | Soils, Roots and Microorganisms | 1, 2, 3, 4 |
| **Week 6** | 10.03.26 | Transport and Translocation of Water and Solutes | 1, 2, 3, 4 |
| **Week 7** | 17.03.26 | Photosynthesis-Light Reactions | 1, 2, 3, 4 |
| **Week 8** | 24.03.26 | Photosynthesis-Carbon Reactions | 1, 2, 3, 4 |
| **Week 9** | 31.03.26 | **Mid-term exam** | |
| **Week 10** | 07.04.26 | Respiration | 1, 2, 3, 4 |
| **Week 11** | 14.04.26 | Secondary Metabolites and Plant Defense I | 1, 2, 3, 4 |
| **Week 12** | 21.04.26 | Secondary Metabolites and Plant Defense II | 1, 2, 3, 4 |
| **Week 13** | 28.04.26 | Growth and Development I | 1, 2, 3, 4 |
| **Week 14** | 05.05.26 | Growth and Development II | 1, 2, 3, 4 |
| **Week 15** | 12.05.26 | Plant Growth Regulators (Fist Five) | 1, 2, 3, 4 |
| | 16-25.05.26 | **Final exam** | |
| | | | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | | 50 | 50 |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | | 50 | 50 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 0 | | 0 | 0 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 0 | 0 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 4 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 4 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 217 | Phytopathology | Compulsory | 3 | 0 | 0 | 3 | 4 | Tuesday / 14.00-16.50 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 3rd Semester | **Frequency:** | each fall term | **Planned class size:** | |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Turgut Alas | **Office Hours Schedule:** | Monday / 09.00-12.00 |
| **E-mail** | talas@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2526 | **Office/Room No:** | AS240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Etiology, symptoms, mode of spread, survival, epidemiology and management of diseases of horticulture crops. Study of symptoms and host – parasite relationship of important diseases of fruits, vegetables, spices and condiments, plantation and horticulture crops. |
| **Learning Outcomes:** | 1.Identify factors, symptoms, and cycles of plant diseases. Define the role of suppression options as explained by the disease triangle.<br>2.Identify abiotic and biotic factors, plant pathogens.<br>3.Describe biological attributes of various types of plant diseases.<br>4.Identify plant selection and resistance as a plant disease control option. |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Arjunan, G. Karthikeyan, G. Dinakaran, D. Raguchander, T.1999. Diseases of Horticultural Crops, AE Publications, Coimbatore |
| | 2 | Snowden, A.L. 1990. A Colour atlas of Post harvest diseases and disorders. Vol I & IIWolfe Scientific Limited. |
| | 3 | Singh, R.S.1999. Diseases of Vegetable Crops. Oxford & IBH Publications, New Delhi. 247. |
| | 4 | Pathak, P.N. 2001. Diseases of Fruit Crops. Oxford & IBH Publications, New Delhi. 350. |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | | Disesase Triangle, Abiotic and Biotic Factors | 1 |
| **Week 2** | | Objectives of Plant Pathology | 1 |
| **Week 3** | | Plant Disease General Concept | 1 |
| **Week 4** | | Plant Pathogenic Fungus | 2 |
| **Week 5** | | Plant Pathogenic Bacteria | 2 |
| **Week 6** | | Plant Pathogenic Virus, General Virus Symptoms | 2 |
| **Week 7** | | Plant Pathogenic Virus, General Virus Symptoms | 2 |
| **Week 8** | | ***MIDTERM EXAM*** | |
| **Week 9** | | Management of Plant Diseases | 3 |
| **Week 10** | | Polymerase Chain Reaction (PCR) | 3 |
| **Week 11** | | Interactions of Plant Pathogenic Bacteria and Plant Growth Promoting Rhizobacteria with Plant | 3 |
| **Week 12** | | Gel Electrophoresis | 3 |
| **Week 13** | | Nutrient Defficiency Symptoms | 4 |
| **Week 14** | | Environmental Stress and Plant Growth | 4 |
| **Week 15** | | ***Final exam*** | |
| **Week 16** | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | | 40 | 100 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 0 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 0 | 0 |
| TLH Self Study | 14 | 60 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 8 |
| | | | **TOTAL :** | | **120** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **4.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 218 | Entomology | Compulsory | 2 | 2 | 0 | 3 | 5 | Tuesday 14:00-17:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 4th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Murat Helvacı | **Office Hours Schedule:** | Monday 14:00-17:00, Tuesday 09:00-12:00, Wednesday 09:00-11:00;15:00-17:00, Friday 09:00-12:00;14:00-17:00 |
| **E-mail** | mhelvaci@eul.edu.tr | | |
| **Phone** | 0 542 850 0336 | **Office/Room No:** | AS 240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | To understand insect pests, their biology, morphology and learning basic control tactics in Integrated Pest Management. |
| **Learning Outcomes:** | Learning outcomes of the lecture can be summerized as below:<br>1- Identify to Order, at sight, any common insect;<br>2- Identify to Family, at sight and with the aid of keys, several members of common Orders;<br>3- Correctly spell all Family names;<br>4- Learn the name, history, biology, habitat and hosts of each taxa. |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| **PO1: 3** | **PO7: 1** | **(1) Strongly disagree;** | |
| **PO2: 1** | **PO8: 2** | **(2) Disagree;** | |
| **PO3: 4** | **PO9: 1** | **(3) Neither agree nor disagree;** | |
| **PO4: 5** | **PO10: 1** | **(4) Agree;** | |
| **PO5: 2** | | **(5) Strongly agree.** | |
| **PO6: 1** | | | |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Fakhri, M. S. A, Gindaba, A., Negeri, M. (2022). Handbook of Insect Morphology Physiology & Taxonomy (1st Edition). Akinik Publications, India. 533p. |
| | 2 | Wins, J. A., Kumari V. J., Babasaheb, J. S., Kumar, K. R., Mahamuni, R. R., Sangeetha, P. (2022). Textbook of Entomology (1st Edition). AIB Saliha Publications, India. 239p. |
| | 3 | Patel, L. C. (2023).Applied Entomology: Insect Ecology and Integrated Pest Management (1st Edition). CRC Press, 331p. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 03.02.2026 | Morphology of Insect Body | 1,2/3,1 |
| **Week 2** | 10.02.2026 | Pest Management | 2,5/3,5/3,14/3,15/3,16 |
| **Week 3** | 17.02.2026 | Learning External Anatomy of Insects | 1,2 |
| **Week 4** | 24.02.2026 | Determination of Grasshoppers (Orthoptera) | 1,3/1,6 |
| **Week 5** | 03.03.2026 | Determination of Earwigs (Dermaptera) | 1,6 |
| **Week 6** | 10.03.2026 | Determination of Order Lepidoptera | 1,9/2,3/3,13 |
| **Week 7** | 17.03.2026 | Determination of Neuroptera (Lacewings) | 1,8-1,11 |
| **Week 8** | 24.03.2026 | Determination of Order Hymenoptera | 2,2 |
| **Week 9** | 31.03.2026 | Determination Hemiptera and Homoptera Orders | 1,3/1,7/2,4/2,6 |
| **Week 10** | ***04-12 April 2026*** | ***Midterm(s)*** | |
| **Week 11** | 14.04.2026 | Determination of Order Thysanoptera | 2,4 |
| **Week 12** | 21.04.2026 | Determination of Order Odonata | 1,5 |
| **Week 13** | 28.04.2026 | Determination of Order Coleoptera | 1,12/2,2 |
| **Week 14** | 05.05.2026 | Determination of Order Diptera | 1,10/2,4 |
| **Week 15** | 12.05.2026 | Determination of Psocoptera | 1,7 |
| **Week 16** | ***16-25 May 2026*** | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 16-25 May 2026 | 50 | 100 |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 04-12 April 2026 | 40 | 80 |
| **Quiz(zes)** | | | | |
| **Project(s)** | | | | |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | | | | |
| **Attendance** | | | | |

****** Lifelong Learning Programme (LLP) ******

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 13 | 26 | Homework | 1 | 2 |
| TLH Self Study | 13 | 52 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 4 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 13 | 22 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 13 | 36 | FE preparation self study | 1 | 4 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 226 | Plant Biochemistry | Compulsory | 3 | 0 | 0 | 3 | 5 | Thursday / 14.00-17.00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 4th Semester | **Frequency:** | each spring term | **Planned class size:** | 20 |
| **Teaching methods:** | Lectures | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Turgut Alas | **Office Hours Schedule:** | re-announced each semester |
| **E-mail** | talas@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2576 | **Office/Room No:** | AS310 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Plant Biochemistry is designed as a course to expose the students to the biochemical processes that take place in plant such as plant metabolism, photosynthesis, plant secondary metabolites, plant hormones, and the use of plant in folklore medicine. |
| **Learning Outcomes:** | 1. Understand plant cell structure, organization, and apply specific biochemical functions to all compartments of the plant cell.Learn the structure, function and biosynthetic pathways of essential biochemical molecules including their key chemical and physical properties.<br>2. Learn amino acid structures and relate their chemical properties to the synthesis and function of proteins and enzymes.<br>3. Understand how light energy is captured and used to provide chemical forms of energy to power the functions of cells and whole plants. The importance of CO2 fixation and carbohydrate metabolism will be presented. The nature and composition of plant cell walls will be explored.<br>4. Learn about the rich diversity of secondary compounds and metabolism in plants and how such compounds contribute to human health. |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Nelson, D. L. and. Cox, M. M. (2005): Lehninger's.Principles.of.Biochemistry. W. H Freeman and Company, New York. |
| | 2 | Farabee, M.J. (2007): Cells II: Cellular Organization |
| | 3 | Bob B. Buchanan, Wilhelm Gruissem, et al. 2015. Biochemistry and Molecular Biology of Plants. |
| | 4 | |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 05.02.26 | Structure and biochemical aspects of cell organelles | 1 |
| **Week 2** | 12.02.26 | Cell Division | 1, 2 |
| **Week 3** | 19.02.26 | Photosynthesis | 1, 2 |
| **Week 4** | 26.02.26 | Respiration | 1, 2 |
| **Week 5** | 05.03.26 | Carbohydrates, Classification of Carbohydrates | 1, 2 |
| **Week 6** | 12.03.26 | Glycolysis,Kreb's Cycle and Phosphorylation | 1, 2 |
| **Week 7** | 19.03.26 | Primary Metabolism of Polysaccharides | 1, 2 |
| **Week 8** | 26.03.26 | Lipids and their metabolism | 1, 2 |
| **Week 9** | 02.04.26 | Proteins and Nucleic Acids | 1, 2, 3 |
| **Week 10** | | ***Midterm Exam*** | |
| **Week 11** | 16.04.26 | Cell Wall Structure | 1, 2, 3 |
| **Week 12** | 23.04.26 | ***Holiday*** | |
| **Week 13** | 30.04.26 | Nitrogen Cycle and Nitrogen Fixation | 1 |
| **Week 14** | 07.05.26 | Secondary Metabolites | 1 |
| **Week 15** | 14.05.26 | Secondary Metabolites | 1 |
| **Week 16** | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 16-25 May 2026 | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 04-12 April 2026 | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 1 | 3 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **151** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.03** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 228 | Field Crops | Compulsory | 2 | 2 | 0 | 3 | 5 | Thursday 09:00-12:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 4th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Murat Helvacı | **Office Hours** | Monday 14:00-17:00, Tuesday 09:00-12:00, Wednesday |
| **E-mail** | mhelvaci@eul.edu.tr | **Schedule:** | 09:00-11:00;15:00-17:00, Friday 09:00-12:00;14:00-17:00 |
| **Phone** | 0 542 850 0336 | **Office/Room No:** | AS 240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Learn to recognize different field crops and their characteristics. |
| **Learning Outcomes:** | Learning outcomes of the lecture can be summerized as below:<br>1- Introduce students to the basic concepts of field crops (corn, wheat, cotton, soybean, and other) growth.<br>2- Develop the students' understanding and comprehension of agronomic production practices of field crops<br>3- Develop students understanding equipment used in crop production. |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| **PO1: 5** | **PO7: 4** | **(1) Strongly disagree;** |
| **PO2: 1** | **PO8: 3** | **(2) Disagree;** |
| **PO3: 2** | **PO9: 1** | **(3) Neither agree nor disagree;** |
| **PO4: 3** | **PO10: 1** | **(4) Agree;** |
| **PO5: 4** | | **(5) Strongly agree.** |
| **PO6: 1** | | |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Joshi, M. (2015). Textbook of Field Crops. PHI Learning, India, 580p. |
| | 2 | Jayaraman, N. (2015). Nutrient Deficiencies of Field Crops: Guide to Diagnosis and Management, United States: Scitus Academics LLC. 250p. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 05.02.2026 | History of Field Crops-Agronomic Classification of Field Crops | 1,1.2-1,1.10 |
| **Week 2** | 12.02.2026 | Economics of Field Crops in the World | 1,1.1 |
| **Week 3** | 19.02.2026 | Preparation of Seedbed | 1,1.11 |
| **Week 4** | 26.02.2026 | Germination and Growth | 1,20.7 |
| **Week 5** | 05.03.2026 | Crop rotation | 1,18.14 |
| **Week 6** | 12.03.2026 | Tillage Practices | 1,18.14 |
| **Week 7** | 19.03.2026 | Bayram Holiday | |
| **Week 8** | 26.03.2026 | Crops and Their Relation to Environment | 1,19.5 |
| **Week 9** | 02.04.2026 | Fertilizers | 2,1/2,2 |
| **Week 10** | ***04-12 April 2026*** | ***Midterm(s)*** | |
| **Week 11** | 16.04.2026 | Seeds and Seeding Practices | 1,1.8 |
| **Week 12** | 23.04.2026 | Public Holiday | |
| **Week 13** | 30.04.2026 | Cereals (Corn, Wheat, Barley) - Legumes and Miscellaneous and Sweet Potato Production | 1,1/1,7/2,1 - 1,3/2,2-2,5 |
| **Week 14** | 07.05.2026 | Forage Crops (Alfalfa) and Jute Production | 1,5.20/1,13/2,6 |
| **Week 15** | 14.05.2026 | Industrial Crops (Sunflower, Cotton, Potato) | 1,4/1,5/1,12/2,3/2,5 |
| **Week 16** | ***16-25 May 2026*** | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 16-25 May 2026 | 50 | 100 |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 04-12 April 2026 | 40 | 80 |
| **Quiz(zes)** | 1 | | | |
| **Project(s)** | | | | |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | | | | |
| **Attendance** | | | | |

******** ***Lifelong Learning Programme (LLP)*** *******

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 13 | 26 | Homework | 1 | 2 |
| TLH Self Study | 13 | 52 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 4 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 13 | 22 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 13 | 36 | FE preparation self study | 1 | 4 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 251 | Vegetable Production I | Compulsory | 3 | 0 | 0 | 3 | 5 | Wednesday 14:00-17:00 |
| Prerequisite: | n/a | Prerequisite to: | | | | n/a | | |
| Semester: | 3rd Semester | Frequency: | each fall term | | | Planned class size: | | 30 students |
| Teaching methods: | Lectures, assignment and discussions | | | | | Duration: | | 1 semester |

| | | | |
|---|---|---|---|
| Course Lecturer: | Assist. Prof. Dr. Serhat Usanmaz | Office Hours Schedule: | |
| E-mail | susanmaz@eul.edu.tr | | |
| Phone | +90 392 660 2000 | Office/Room No: | Güzelyurt Research and Application Farm |
| Teaching Assistant: | | Phone: | |
| E-mail: | | Office/Room No: | |

| | |
|---|---|
| Course Objectives: | Vegetables are vital sources of minerals, vitamins and dietary fibers. Recent development in agriculture and horticulture has influenced positively vegetable production in the world. The aim of this course is to provide students a basic knowledge of the principles of vegetable growing technologies. The course starts with the classification of vegetables and their economic importance and nutritional values. The major topics of the course are "vegetable production systems and exploitation forms", "ecological and economic factors influencing vegetable production, "planning a vegetable garden or exploitation", "seed propagation and seedling production", "soil preparation", "seeding and transplanting", "management practices", "pest, disease and weed control" and "crop rotation". "Harvesting", "postharvest handling", "storage and market preparation of vegetables" are also discussed. |
| Learning Outcomes: | 1) The aim of this course is to provide to student detailed information on the principles and practices of commercial vegetable production, flower types of vegetables and fertilisation biology, including the most important vegetables belonging to Solanacea, Cucurbitacea, Malvacea, Fabacea, Amaryllidacea, Liliacea, Brassicacea, Umbelliferae, Chemopodiacea and Compositea families.<br>2) Students will learn the basic methods of vegetable grafting and plant care.<br>3) Students will be able to choose appropriate production systems and technologies, irrigation systems and diagnose problems related to biotic and abiotic stress and to find suitable solutions to these problems. |

| Programme Outcome Relations | | | |
|---|---|---|---|
| PO1: 5<br>PO2: 1<br>PO3: 3<br>PO4: 2<br>PO5: 4<br>PO6: 1 | PO7: 2<br>PO8: 1<br>PO9: 1<br>PO10: 1 | (1) Strongly disagree;<br>(2) Disagree;<br>(3) Neither agree nor disagree;<br>(4) Agree;<br>(5) Strongly agree. | |

| Textbooks and/or References: | | |
|---|---|---|
| | 1 | Salunkhe, D. K., & Kadam, S. S. (1998). Handbook of vegetable science and technology: production, compostion, storage, and processing. CRC press. |
| | 2 | Sinha, N. K., Hui, Y. H., Evranuz, E. Ö., Siddiq, M., & Ahmed, J. (2010). Handbook of vegetables and vegetable processing. John Wiley & Sons. |
| | 3 | Welbaum, G. E. (2015). Vegetable production and practices. CABI. |
| | 4 | Colla, G., Pérez-Alfocea, F., & Schwarz, D. (2017). Vegetable grafting: principles and practices. CABI. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 24.09.2025 | Introduction to vegetable production | 1, 2, 3 |
| Week 2 | 01.10.2025 | Vegetable production systems and exploitation forms | 1, 2, 3 |
| Week 3 | 08.10.2025 | Ecological factors influencing vegetable production | 1, 2, 3 |
| Week 4 | 15.10.2025 | Economic factors influencing vegetable production | 1, 2 |
| Week 5 | 22.10.2025 | Planning a vegetable garden or exploitation | 1, 2, 3 |
| Week 6 | 29.10.2025 | Public Holiday | |
| Week 7 | 05.11.2025 | Seed propagation and seedling production - Soil preparation | 1, 2, 3 |
| Week 8 | ***08-16 Nov. 2025*** | ***Mid-term exam*** | |
| Week 9 | 19.11.2025 | Seeding and transplanting | 1,2,3 |
| Week 10 | 26.11.2025 | Management practices (including grafting and plant care) | 1, 2, 3, 4 |
| Week 11 | 03.12.2025 | Pest, disease and weed control | 1, 2, 3 |
| Week 12 | 10.12.2025 | Crop rotation | 1, 2, 3 |
| Week 13 | 17.12.2025 | Harvesting | 1, 2 |
| Week 14 | 24.12.2025 | Postharvest handling - Storage and market preparation of vegetables | 1, 2 - 1,2,3 |
| Week 15 | 31.12.2025 | Public Holiday | |
| Week 16 | ***03-11 Jan. 2026*** | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | 03-11 January 2026 | 60 | |
| Semester Evaluation | | | 40 | |
| Midterm(s) | 1 | 08-16 November 2025 | 40 | 100 |
| Quiz(zes) | 0 | | 0 | 0 |
| Project(s) | 0 | | 0 | 0 |
| Homework(s) | 0 | | 0 | 0 |
| Laboratory | 0 | | 0 | 0 |
| Attendance | 0 | | 0 | 0 |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 0 | 0 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 12 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 252 | Vegetable Production II | Compulsory | 2 | 2 | 0 | 3 | 5 | *Wednesday 09:00-12:00* |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 4th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Serhat Usanmaz | **Office Hours Schedule:** | |
| **E-mail** | susanmaz@eul.edu.tr | | |
| **Phone** | 0542 880 6373 | **Office/Room No:** | *AUÇ* |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | This course provides students detailed information on the principles and practices of commercial vegetable production. In the course, the most important vegetables belonging to Solanaceae, Cucurbitaceae, Malvaceae, Fabaceae, Amaryllidaceae, Liliaceae, Brassicaceae, Umbelliferae, Chenopodiaceae and Compositae families will be described. |
| **Learning Outcomes:** | 1) To improve the knowledge of the students about the biology, reproduction and production of major vegetable crops<br>2) Students will get more detail information about the sub-species and varieties of several vegetable groups in horticultural production<br>3) The students will gain information about the control of pests, diseases and weeds of vegetable crops<br>4) Students will learn the environmental stress factors, which affect vegetable production and will gain information about managing these factors<br>5) To improve the understandings of the students about the phytochemical composition and health benefits of vegetable crops<br>6) The students will be able to compare the different production methods and select the most suitable method for site-specific conditions |

**Textbooks and/or References:**


1. Salunkhe, D. K., & Kadam, S. S. (1998). Handbook of vegetable science and technology: production, compostion, storage, and processing. CRC press.
2. Welbaum, G. E. (2015). Vegetable production and practices. CABI.
3. Nonnecke, I. L. (1989). Vegetable production. Springer Science & Business Media.
4. Rai, N., & Yadav, D. S. (2005). Advances in vegetable production. Researchco Book Centre.


| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | Introduction to vegetable production | 1, 2, 3, 4 |
| Week 2 | | Tomato | 1, 2, 3, 4 |
| Week 3 | | Cucumber | 1, 2, 3, 4 |
| Week 4 | | Melon | 1, 2, 3, 4 |
| Week 5 | | Water melon | 1, 2, 3, 4 |
| Week 6 | | Onion | 1, 2, 3, 4 |
| Week 7 | | Pepper | 1, 2, 3, 4 |
| Week 8 | | ***Mid-term exam*** | |
| Week 9 | | Eggplant | 1, 2, 3, 4 |
| Week 10 | | lettuce | 1, 2, 3, 4 |
| Week 11 | | Garlic | 1, 2, 3, 4 |
| Week 12 | | Cole crops | 1, 2, 3, 4 |
| Week 13 | | Couliflowers | 1, 2, 3, 4 |
| Week 14 | | Leek and Asparagus | 1, 2, 3, 4 |
| Week 15 | | Carrot | 1, 2, 3, 4 |
| Week 16 | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | | 60 | |
| **Semester Evaluation** | | | 60 | |
| **Midterm(s)** | 1 | | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 0 | | 0 | 0 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 12 | 36 | Homework | 1 | 4 |
| TLH Self Study | 12 | 72 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 2 | 6 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 2 | 12 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| **AGRI 253** | **Agricultural Mechanization** | Elective | 3 | 0 | 0 | 3 | 5 | Monday 14:00-17:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 3rd Semester | **Frequency:** | each fall term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Murat Helvacı | **Office Hours Schedule:** | Monday 14:00-17:00/Tuesday 14:00-17:00/Wednesday 09:00-12:00 & 14:00-17:00/Thursday 09:00-12:00 |
| **E-mail** | mhelvaci@eul.edu.tr | | |
| **Phone** | 0 542 850 0336 | **Office/Room No:** | AS 240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | This course deals with design and use of agricultural machinery in relation to power engines, power transmission including hydraulics. Farm machinery topics covers the types and use of various tillage and harvesting equipment, their calibrations and service. Design and use of agricultural electrification as electrical circuits, motors, control systems for product processing and conservation for conditioning agricultural structures and for processing of farm products will be included as well. |
| **Learning Outcomes:** | 1) To improve the students' understanding about farm machinery topics, including various tillage and harvesting equipment, their calibrations and service. The digital farming techniques of these subjects will also be learnt.<br>2) To teach the importance of nozzles in pesticide applications and nozzle selection.<br>3) To teach the advantages and disadvantages of several agricultural equipment to the students<br>4) To improve the understandings of students about seeding, trans planters, fertilizer technology and etc. |

| | | | |
|---|---|---|---|
| **Programme Outcome Relations** | **PO1: 3**<br>**PO2: 1**<br>**PO3: 2**<br>**PO4: 1**<br>**PO5: 5**<br>**PO6: 1** | **PO7: 4**<br>**PO8: 2**<br>**PO9: 1**<br>**PO10: 1** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Kormawa, P., Mrema, G., Mhlanga, N., Fynn, M. K., Kienzle, J., & Mpagalile, J. (2019). Sustainable agricultural mechanization: a framework for Africa. Sustainable agricultural mechanization: a framework for Africa. |
| | 2 | Diao, X., Silver, J., & Takeshima, H. (2016). Agricultural mechanization and agricultural transformation (Vol. 1527). Intl Food Policy Res Inst. |
| | 3 | Smith, H. P. (2020). Farm Machinery and Equipment. United Kingdom: Read Books Limited. |
| | 4 | Agricultural Automation: Principles, Systems and Applications. (2022). United States: LARSEN & KELLER EDUCATION. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 22.09.2025 | Introduction | 1, 2, 3 |
| **Week 2** | 29.09.2025 | History of Farm Technology | 1, 2, 3, 4 |
| **Week 3** | 06.10.2025 | Tractors- I | 1, 2, 3 |
| **Week 4** | 13.10.2025 | Tractors- II (Diesel Engines) | 1, 2, 3 |
| **Week 5** | 20.10.2025 | Tractors- III (Transmission) | 1, 2, 3 |
| **Week 6** | 27.10.2025 | Compaction and Tillage | 1, 2, 3, 4-1, 2, 3 |
| **Week 7** | 03.11.2025 | Seeding Machines | 1,2,3 |
| **Week 8** | ***08-16 Nov. 2025*** | ***Midterm(s)*** | |
| **Week 9** | 17.11.2025 | Transplanters | 1,2,3 |
| **Week 10** | 24.11.2025 | Fertilizer Distribution | 1,2,3 |
| **Week 11** | 01.12.2025 | Irrigation technology | 1, 2, 3 |
| **Week 12** | 08.12.2025 | Pesticide application | 1, 2, 3, 4 |
| **Week 13** | 15.12.2025 | Plant Protection Machines | 1, 2, 3, 4 |
| **Week 14** | 22.12.2025 | Harvesting | 1, 2-1 |
| **Week 15** | 29.12.2025 | Machinery Management | 1, 2, 3 |
| **Week 16** | ***03-11 Jan. 2026*** | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 03-11 January 2026 | 50 | |
| **Semester Evaluation** | | | 40 | |
| **Midterm(s)** | 1 | 08-16 November 2025 | 40 | 80 |
| **Quiz(zes)** | | | | |
| **Project(s)** | | | | |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | | | | |
| **Attendance** | | | | |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 13 | 39 | Homework | 1 | 4 |
| TLH Self Study | 13 | 78 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 1 | 3 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 1 | 6 | FE preparation self study | 1 | 8 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 255 | Basics of Fruit Production | Compulsory | 3 | 0 | 0 | 3 | 5 | Wednesday 09:00-11:50 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 3rd Semester | **Frequency:** | each fall term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Prof. Dr. Mehmet Atilla Aşkın | **Office Hours Schedule:** | Tuesday 13:00-14:00 |
| **E-mail** | maskin@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2677 / 0533 8751224 | **Office/Room No:** | AS 217 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | This course gives the students information about basic aspects of fruit production, with respect to fruit classification, flowers and pollination, sexual and asexual production, orchard design and management, pruning, thinning operations, production of various fruit trees including citrus, olives; pomaceous fruits (apples, pears, stone fruits, apricots, peaches, plums) and berries (raspberries, blackberries). |
| **Learning Outcomes:** | 1. Learn the basic principles of classification of the fruit<br>2. Learn the basic principles of flowering biology and understand the pollination and fertilization,<br>3. Learn the basic principles of dormancy of buds, temperature, light and other environmental condition,<br>4. How we get more fruit from fruit threes and vegetables |

| | | | |
|---|---|---|---|
| **Programme Outcome Relations** | **PO1: 5**<br>**PO2: 5**<br>**PO3: 3**<br>**PO4:4**<br>**PO5: 5**<br>**PO6: 4** | **PO7: 5**<br>**PO8: 4**<br>**PO9: 3**<br>**PO10: 5** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Introduction to Fruit Crops (Crop Science) by Mark Rieger, 2006. |
| | 2 | Temperate and Subtropical Fruit Production by David I. Jackson and Norman Looney, 1999. |
| | 3 | Genel Meyvecilk. ISBA: 978-605-133-253-6. Nobel press. 2023 |
| | 4 | Temperate zone pomology. Timber Press. ISBN-13 978-1604690705. 2009 |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 01.10.2025 | Flower | 1,2,3,4 |
| **Week 2** | 08.10.2025 | Pollination | 1,2,3,4 |
| **Week 3** | 15.10.2025 | Fertilization | 1,2,3,4 |
| **Week 4** | 22.10.2025 | Classification of Fruits | 1,2,3,4 |
| **Week 5** | 29.10.2025 | republic day | 1,2,3,4 |
| **Week 6** | 05.11.2025 | Aggregate Fruits | 1,2,3,4 |
| **Week 7** | *08-16.11.2025* | **Mid-term exam** | |
| **Week 8** | 19.11.2025 | Multiple Fruits | 1,2,3,4 |
| **Week 9** | 26.11.2025 | Sexual and Asexual Reproduction of Fruits | 1,2,3,4 |
| **Week 10** | 03.12.2025 | Floral induction and initiation | 1,2,3,4 |
| **Week 11** | 10.12.2025 | Orchard Design and Management | 1,2,3,4 |
| **Week 12** | 17.12.2025 | Winter Frost incury | 1,2,3,4 |
| **Week 13** | 31.12.2025 | Pathenocarpy, Fruit develoment & Tissue Culture | 1,2,3,4 |
| **Week 14** | 03-11.01.2026 | **Final Exam** | |
| **Week 15** | | | |
| **Week 16** | | | |

| Evaluation Tools | Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|---|
| | **Final Exam** | 1 | | 50 | 50 |
| | **Semester Evaluation** | | | 50 | |
| | **Midterm(s)** | 1 | | 30 | 30 |
| | **Quiz(zes)** | 0 | | 0 | 0 |
| | **Project(s)** | 0 | | 0 | 0 |
| | **Homework(s)** | 1 | | 20 | 20 |
| | **Laboratory** | 0 | | 0 | 0 |
| | **Attendance** | 0 | | 0 | 0 |

****** Lifelong Learning Programme (LLP) ******

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 1 | 4 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| **AGRI 302** | **Field Practice II** | Compulsory | 2 | 2 | 0 | 3 | 6 | *Thursday 09:00-12:00* |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 5th Semester | **Frequency:** | each fall term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Serhat Usanmaz | **Office Hours Schedule:** | |
| **E-mail** | susanmaz@eul.edu.tr | | |
| **Phone** | 0542 880 6373 | **Office/Room No:** | *AUÇ* |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | This course is the spring term continuation of Field Practice1 activities in accordance with the horticultural production. calendar. All areas of horticulture, e.g. vegetable production in field and greenhouse; orchard and greenhouse management, and nursery production will be presented and the student will be involved in field works. Emphasis will be placed on equipment used in production and its maintenance. |
| **Learning Outcomes:** | 1) To provide students with a technical information on horticultural techniques and the basic understanding of fruit and vegetable production and orchards management (including soil selection, irrigation, pruning and etc.). Additionally, it allows students to understand the principles of crop protection from weeds, pests and diseases in horticultural crops. |

**Textbooks and/or References:**


1. Chadha, K. L. (2001). Handbook of horticulture. Handbook of horticulture.
2. Bisbis, M. B., Gruda, N. S., & Blanke, M. M. (2019). Securing horticulture in a changing climate—A mini review. Horticulturae, 5(3), 56.
3. Acquaah, G. (2008). Horticulture: principles and practices (No. Ed. 4). Pearson education, Inc.


| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | | Introduction to horticultural crops: site selection and planting | 1, 2, 3 |
| **Week 2** | | Importance of soil and climate in horticulture | 1, 2, 3 |
| **Week 3** | | Soil preperation and orchard management | 1, 2, 3 |
| **Week 4** | | Soil preperation and orchard management (continue) | 1, 2, 3 |
| **Week 5** | | Irrigation of the horticultural crops | 1, 2, 3 |
| **Week 6** | | Soil management and fertilization | 1, 2, 3 |
| **Week 7** | | Pruning and thinning of fruit trees | 1, 2, 3 |
| **Week 8** | | ***Mid-term exam*** | |
| **Week 9** | | Pruning and thinning of fruit trees (continue) | 1, 2, 3 |
| **Week 10** | | Grafting of fruits and vegetables | 1, 2, 3 |
| **Week 11** | | Grafting of fruits and vegetables (continue) | 1, 2, 3 |
| **Week 12** | | Soilles culture and greenhhouse | 1, 2, 3 |
| **Week 13** | | Soilles culture and greenhhouse (continue) | 1, 2, 3 |
| **Week 14** | | Pest and Disease Management | 1, 2, 3 |
| **Week 15** | | Weed management and miscellaneous | 1, 2, 3 |
| **Week 16** | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 4 |
| TLH Self Study | 14 | 56 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 42 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **180** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **6.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours | | | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| | | | T | A | L | | | |
| AGRI 303 | Field Practice I | Compulsory | 2 | 2 | 0 | 3 | 6 | Thursday 09:00-12:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 5th Semester | **Frequency:** | each fall term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Serhat Usanmaz | **Office Hours Schedule:** | |
| **E-mail** | susanmaz@eul.edu.tr | | |
| **Phone** | +90 392 660 2000 | **Office/Room No:** | Güzelyurt Research and Application Farm |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Students have access to facilities in the Research and Application Farm of EUL to apply the theoretical knowledge they acquire in the classes. There are open field plots and greenhouse facilities for vegetable growing, and orchards of fruit crops such as citrus varieties, collection plantations olive and Pomegranate varieties and plots of various tropical and subtropical fruit trees as well as a collection vineyard. Nurseries are active year round production of citrus and olive saplings. Students take part in the various seasonal horticultural activities to strengthen their theoretical knowledge by performing the various task themselves. |
| **Learning Outcomes:** | 1) Improving the students' understanding about the importance of horticultural crops, selection of horticultural crops and reproduction of horticultural crops<br>2) It is aimed to teach the soil characteristics and its relationship between crop selection<br>3) Students will be able to understand the impacts of different environmental stress conditions on the crop yield and quality and how to manage these conditions<br>4) The students will also learn the practical applications of pruning, training, grafting together with practical information about pests, diseases, weeds and greenhouse crop management |

| | | | |
|---|---|---|---|
| **Programme Outcome Relations** | **PO1: 3**<br>**PO2: 1**<br>**PO3: 3**<br>**PO4: 4**<br>**PO5: 5**<br>**PO6: 2** | **PO7: 3**<br>**PO8: 1**<br>**PO9: 4**<br>**PO10: 1** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Chadha, K. L. (2001). Handbook of horticulture. Handbook of horticulture. |
| | 2 | Chesworth, W. (Ed.). (2007). Encyclopedia of soil science. Springer Science & Business Media. |
| | 3 | Bisbis, M. B., Gruda, N. S., & Blanke, M. M. (2019). Securing horticulture in a changing climate—A mini review. Horticulturae, 5(3), 56. |
| | 4 | Fereres, E., Goldhamer, D. A., & Parsons, L. R. (2003). Irrigation water management of horticultural crops. HortScience, 38(5), 1036-1042. |
| | 5 | Ferree, D. C., & Schupp, J. R. (2003). Pruning and training physiology. Apples: botany, production and uses, 319-344. |
| | 6 | Rivero, R. M., Ruiz, J. M., & Romero, L. (2003). Role of grafting in horticultural plants under stress conditions. Journal of Food Agriculture and Environment, 1, 70-74. |
| | 7 | Campiotti, C. A., Viola, C., Alonzo, G., Bibbiani, C., Giagnacovo, G., Scoccianti, M., & Tumminelli, G. (2012). SUSTAINABLE GREENHOUSE HORTICULTURE IN EUROPE. Journal of sustainable energy, 3(3). |
| | 8 | Acquaah, G. (2008). Horticulture: principles and practices (No. Ed. 4). Pearson education, Inc. |
| | 9 | Kahramanoglu, I. (Ed.). (2017). Postharvest Handling. BoD–Books on Demand. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 25.09.2025 | Introduction to horticultural crops | 1 |
| **Week 2** | 02.10.2025 | Importance of soil in horticulture | 1 |
| **Week 3** | 09.10.2025 | Soil Selection in horticultural crops | 2 |
| **Week 4** | 16.10.2025 | Soil tillage | 2 |
| **Week 5** | 23.10.2025 | Importance of climate in crop selection | 3 |
| **Week 6** | 30.10.2025 | Irrigation of the horticultural crops | 4 |
| **Week 7** | 06.11.2025 | Pruning and thinning of fruit trees | 5 |
| **Week 8** | ***08-16 Nov. 2025*** | ***Mid-term exam*** | |
| **Week 9** | 20.11.2025 | Grafting of fruits and vegetables | 6 |
| **Week 10** | 27.11.2025 | Greenhouse crop management | 7 |
| **Week 11** | 04.12.2025 | Soilless production | 7 |
| **Week 12** | 11.12.2025 | Pests of horticultural crops | 1, 8 |
| **Week 13** | 18.12.2025 | Diseases of horticultural crops-Weed Management | 1, 8 |
| **Week 14** | 25.12.2025 | Postharvest handling of horticultural crops | 9 |
| **Week 15** | 01.01.2026 | Public Holiday | |
| **Week 16** | ***03-11 Jan. 2026*** | ***Final exam*** | |

| | Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|---|
| **Evaluation Tools** | **Final Exam** | 1 | 03-11 January 2026 | 60 | |
| | **Semester Evaluation** | | | 60 | 60 |
| | **Midterm(s)** | 0 | | | 0 |
| | **Quiz(zes)** | 0 | | 0 | 0 |
| | **Project(s)** | 0 | | 0 | 0 |
| | **Homework(s)** | 1 | | 0 | 0 |
| | **Laboratory** | 0 | | 0 | 0 |
| | **Attendance** | 0 | | 40 | 40 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 4 |
| TLH Self Study | 14 | 56 | Mid-term Exam (ME) | 0 | 0 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 0 | 0 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 4 |
| AH preparation self study | 14 | 48 | FE preparation self study | 1 | 12 |
| | | | **TOTAL :** | | **180** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **6.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 306 | Temperate & Subtropical Fruits | Compulsory | 3 | 0 | 0 | 3 | 5 | Wednesday 09:00 -11:50 AM |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 8th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Prof. Dr. Mehmet Atilla Aşkın | **Office Hours Schedule:** | Monday 14:00 -15:30 PM |
| **E-mail** | maskin@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2502 / 0533 8751224 | **Office/Room No:** | Dean office |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

**Course Objectives:** Principles of fruit production, emphasizing on temperate zone and subtropical fruits are the main subject of this course. Within this course integrated management of temperate and subtropical fruit cropping systems including site selection, cultural and management practices, taxonomic classifications, physiological and environmental control of plant development will be covered. Subject matter will include orchard establishment and production methods.

**Learning Outcomes:**
1. Learn basic principles of temperate fruits (Pome Fruits),
2. Learn basic principles of temperate fruits (Prunes),
3. Learn basic principles of temperate fruits (Nuts),
4. Learn basic principles of subtropic fruits (Olive, banana, avocado, mango, date),
5. Learn basic principles of subtropic fruits (kiwi, pineapple, coconut)

**Programme Outcome Relations**

| | | |
|---|---|---|
| **PO1: 5** | **PO7: 5** | **(1) Strongly disagree;** |
| **PO2: 5** | **PO8: 4** | **(2) Disagree;** |
| **PO3: 3** | **PO9: 3** | **(3) Neither agree nor disagree;** |
| **PO4:4** | **PO10: 5** | **(4) Agree;** |
| **PO5: 5** | | **(5) Strongly agree.** |
| **PO6: 4** | | |

**Textbooks and/or References:**

| | |
|---|---|
| 1 | Temperate zone pomology. M.N. Westwood. W.H Freeman and Company San francisco 2009 |
| 2 | Jackson, D., Looney, N. E., & Morley-Bunker, M. (Eds.). (2011). Temperate and subtropical fruit production. CABI. |
| 3 | Mohamed, Z., AbdLatif, I., & Abdullah, A. M. (2011). Economic importance of tropical and subtropical fruits. In Postharvest biology and technology of tropical and subtropical fruits (pp. 1-20). Woodhead Publishing. |
| 4 | |
| 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 04.02.26 | Introduction to Temperate & Subtropical Fruits | 1, 2, 3 |
| **Week 2** | 11.02.26 | apple growing | 1, 2, 3 |
| **Week 3** | 18.02.26 | Almond Growing | 1, 2, 3 |
| **Week 4** | 25.02.26 | Pear Growing | 1, 2, 3 |
| **Week 5** | 04.03.26 | Olive Growing | 1, 2, 3 |
| **Week 6** | 11.03.26 | Peach Growing | 1, 2, 3 |
| **Week 7** | 18.03.26 | Hazelnut Growing | 1, 2, 3 |
| **Week 8** | 25.03.26 | Fig Growing | |
| **Week 9** | 01.04.26 | Almond Growing | 1, 2, 3 |
| **Week 10** | **08.04.26** | **Midterm exam** | 1, 2, 3 |
| **Week 11** | 15.04.26 | Date Growing | |
| **Week 12** | 22.04.2026 | Walnut and Pistachio Growing | 1, 2, 3 |
| **Week 13** | 29.04.26 | Apricot and Cherry | 1, 2, 3 |
| **Week 14** | 06.06.26 | Avacado and Banana Growing | 1, 2, 3 |
| **Week 15** | 13.05.26 | Coconut and Date Growing | 1, 2, 3 |
| | **16-25.05.26** | **Final exam** | |
| | | | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | | 50 | 50 |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | | 30 | 30 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 20 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction: English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 1 | 4 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 308 | Pests of Horticultural Plants | Compulsory | 2 | 2 | 0 | 3 | 5 | Monday 09:00-12:00 |
| Prerequisite: | n/a | Prerequisite to: | | | | n/a | | |
| Semester: | 6th Semester | Frequency: | each spring term | | | Planned class size: | | 30 students |
| Teaching methods: | Lectures, field practices, assignment and discussions | | | | | Duration: | | 1 semester |

| | | | |
|---|---|---|---|
| Course Lecturer: | Assist. Prof. Dr. Murat Helvacı | Office Hours | Monday 14:00-17:00, Tuesday 09:00-12:00, Wednesday |
| E-mail | mhelvaci@eul.edu.tr | Schedule: | 09:00-11:00;15:00-17:00, Friday 09:00-12:00;14:00-17:00 |
| Phone | 0 542 850 0336 | Office/Room No: | AS 240 |
| Teaching Assistant: | | Phone: | |
| E-mail: | | Office/Room No: | |

| | |
|---|---|
| Course Objectives: | To understand insect pests, learning citrus, strawberry, peach, grape, tomato, olive pests and learning their basic control tactics in agricultural production. |
| Learning Outcomes: | 1- Learn key concepts and background knowledge that will help you make enriched decisions in your career as a horticulturalist, entomologist, or other field<br>2- Recognize beneficial and harmful arthropods associated with horticultural plantings and understand the basics of pest biology (life cycles, behavior, damage, resources need to survive)<br>3- Understand the principles of Integrated Pest Management and how they relate to horticultural crop settings.<br>4- Characterize different types of plant injury and associate it with the arthropod pest that is responsible<br>5- Identify and employ all facets of modern pest management programs, including sampling,interpretation of available thresholds, and multiple management strategies |

| Programme Outcome Relations | | |
|---|---|---|
| PO1: 1<br>PO2: 1<br>PO3: 4<br>PO4: 5<br>PO5: 3<br>PO6: 3 | PO7: 2<br>PO8: 1<br>PO9: 1<br>PO10: 1 | (1) Strongly disagree;<br>(2) Disagree;<br>(3) Neither agree nor disagree;<br>(4) Agree;<br>(5) Strongly agree. |

| Textbooks and/or References: | | |
|---|---|---|
| | 1 | Miall, L. C. (2015). Injurious and Useful Insects: An Introduction to the Study of Economic Entomology. United States: FB&C Limited, 267p. |
| | 2 | Patel, L. C. (2023).Applied Entomology: Insect Ecology and Integrated Pest Management (1st Edition). CRC Press, 331p. |
| | 3 | Omkar, (2019). Pests and Their Management. Singapore: Springer Nature Singapore, 1078p. |
| | 4 | Flint, M. L. (2018). Pests of the Garden and Small Farm: A Grower's Guide to Using Less Pesticide. United States: University of California, Agriculture and Natural Resources. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 02.02.2026 | Introduction to Pests | 3,1/3,2/3,3/3,4/3,5/3,6 |
| Week 2 | 09.02.2026 | Olive Pests | 1,26/2,8/2,10/3,8/4,3 |
| Week 3 | 16.02.2026 | Mediterranean fruit fly | 1,27/2,8/2,10/3,8/4,3 |
| Week 4 | 23.02.2026 | Green Peach Aphid | 1,31/2,8/2,10/3,8/4,3 |
| Week 5 | 02.03.2026 | Grapevine Pests | 2,8/2,10/3,8/4,3 |
| Week 6 | 09.03.2026 | Cabbage Pests | 2,8/2,10/3,8/4,3 |
| Week 7 | 16.03.2026 | Thrips | 2,8/2,10/3,8/4,3 |
| Week 8 | 23.03.2026 | Whiteflies | 2,8/2,10/3,8/4,3 |
| Week 9 | 30.03.2026 | Tomato leafminer | 2,7/2,8/2,10/2,15/3,8/4,3 |
| Week 10 | *04-12 April 2026* | ***Midterm(s)*** | |
| Week 11 | 13.04.2026 | Citrus mealybug | 2,6/1,15/3,8/4,3 |
| Week 12 | 20.04.2026 | Citrus leafminer | 2,8/2,10/3,8/4,3 |
| Week 13 | 27.04.2026 | Citrus rust mite and red mite | 2,3/2,14/3,7/3,8/4,3 |
| Week 14 | 04.05.2026 | Spotted Wing Drosophila | 2,6/2,12/3,8/4,3 |
| Week 15 | 11.05.2026 | Californian Red scale | 1,32/2,8/2,10/3,8/4,3 |
| Week 16 | *16-25 May 2026* | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | 04-12 April 2026 | 50 | 100 |
| Semester Evaluation | | | 50 | |
| Midterm(s) | 1 | 16-25 May 2026 | 40 | 80 |
| Quiz(zes) | | | | |
| Project(s) | | | | |
| Homework(s) | 1 | | 10 | 20 |
| Laboratory | | | | |
| Attendance | | | | |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction: English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 4 |
| TLH Self Study | 14 | 44 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 28 | FE preparation self study | 1 | 8 |
| | | | | **TOTAL :** | **150** |
| | | | | **Recommended ECTS Credit (Total Hours / 30) :** | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 313 | Diseases of Horticultural Plants | Compulsory | 2 | 2 | 0 | 3 | 5 | Monday / 14.00-16.50 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 5th Semester | **Frequency:** | each fall term | **Planned class size:** | |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Turgut Alas | **Office Hours Schedule:** | Tuesday / 10.00-12.00 |
| **E-mail** | talas@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2526 | **Office/Room No:** | AS240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Etiology, symptoms, mode of spread, survival, epidemiology and management of diseases of horticulture crops. Study of symptoms and host – parasite relationship of important diseases of fruits, vegetables, spices and condiments, plantation and horticulture crops. |
| **Learning Outcomes:** | Identify factors, symptoms, and cycles of plant diseases.<br>Define the role of suppression options as explained by the disease triangle.Identify abiotic and biotic factors, plant pathogens.Describe biological attributes of various types of plant diseases.Identify plant selection and resistance as a plant disease control option. |

**Textbooks and/or References:**

| | |
|---|---|
| 1 | Arjunan, G. Karthikeyan, G. Dinakaran, D. Raguchander, T.1999. Diseases of Horticultural Crops, AE Publications, Coimbatore |
| 2 | Snowden, A.L. 1990. A Colour atlas of Post harvest diseases and disorders. Vol I & IIWolfe Scientific Limited. |
| 3 | Singh, R.S.1999. Diseases of Vegetable Crops. Oxford & IBH Publications, New Delhi. 247. |
| 4 | Pathak, P.N. 2001. Diseases of Fruit Crops. Oxford & IBH Publications, New Delhi. 350. |
| 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | Olive Leaf Scorch, Peach Leaf Curl, Solanaceae Diseases | 1 |
| Week 2 | | Stone Fruit Diseases, Crucifers Diseases | 1 |
| Week 3 | | Anthracnose, Grey Mould, Allium Diseases, Citrus Greening | 1 |
| Week 4 | | Olive Peacock Spot, Fungal Diseases on Mango, Citrus Diseases | 2 |
| Week 5 | | Olive Diseases, Tomato Yellow Leaf Curl Virus | 2 |
| Week 6 | | Grape Diseases, Apple Diseases, Bacterial Diseases on Plants | 2 |
| Week 7 | | Grape Diseases, Apple Diseases, Bacterial Diseases on Plants | 2 |
| Week 8 | | ***Midterm Exam*** | |
| Week 9 | | Interactions Between Bacteria and Nematodes | 3 |
| Week 10 | | Physiological Diseases on Plants | 3 |
| Week 11 | | Nutrient Deficiency and Toxicity Symptoms on Citrus Plants | 3 |
| Week 12 | | Gel Electorphoresis | 3 |
| Week 13 | | PCR Techniques to Detect Pathogens | 4 |
| Week 14 | | Disease Observation Methods, Disease Management Methods | 4 |
| Week 15 | | ***Final exam*** | |
| Week 16 | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | | 50 | |
| Semester Evaluation | | | 50 | |
| Midterm(s) | 1 | | 40 | 80 |
| Quiz(zes) | 0 | | 0 | 0 |
| Project(s) | 0 | | 0 | 0 |
| Homework(s) | 1 | | 10 | 20 |
| Laboratory | 0 | | 0 | 0 |
| Attendance | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 4 |
| TLH Self Study | 14 | 42 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 28 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI314 | Plant Nutrition | Compulsory | 2 | 2 | 0 | 3 | 5 | Monday 14:00-17:50, AS217 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 6th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assoc. Prof. Dr. İbrahim Kahramanoğlu | **Office Hours Schedule:** | Monday 10:00-11:50, Wednesday 10:00-11:50 |
| **E-mail** | ikahramanoglu@eul.edu.tr | | |
| **Phone** | +90 392 660 2000 - 2845 | **Office/Room No:** | AS 238 & Institute 203 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Basic terms and principles of mineral nutrition of agricultural plants regarding plant yield determining factors, soil productivity- fertility, movement and root absorption of essential plant nutrient elements, function of these elements in plants, their deficiency symptoms, assessment of deficiencies by plant tests and their correction by fertilization, introduction to fertigation practices will be discussed in this course.<br>The student taking this course is expected to have self confidence in monitoring and interpreting plant performance, and in taking corrective measures of nutritional disorders. |
| **Learning Outcomes:** | The expected outcomes of this course are:<br>1- improve the students' understanding of the basic principles of plant nutrition and introduce the essential plant nutrients to the students<br>2- improve the understanding of the students about relationships among plant nutrients and soil matrix (including plants) and learn the nutrient uptake mechanism of the plants<br>3- learn and discuss the roles of macro and micro nutrients in crops' growth and development and learn the yield & nutrient deficiency symptoms<br>4- improve the knowledge of students about the types of nutrients, fertilizers and calculation of the fertilizer needs of the crops |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| PO1: 4 | PO6: 2 | (1): Strongly disagree; |
| PO2: 2 | PO7: 1 | (2): Disagree; |
| PO3: 4 | PO8: 3 | (3) Neither agree nor disagree; |
| PO4: 1 | PO9: 3 | (4) Agree; |
| PO5: 5 | PO10: 1 | (5) Strongly agree. |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Havlin, J.L., Beaton, J.D., Tisdale, S.L. and Nelson, W.L. (2005) Soil Fertility and Fertilizers: An Introduction to Nutrient Management. 7th Edition, Pearson Educational, Inc., Upper Saddle River, New Jersey |
| | 2 | Anaç, D., & Martin-Prével, P. (Eds.). (1999). Improved crop quality by nutrient management (Vol. 86). Springer Science & Business Media. |
| | 3 | Barker, A. V., & Pilbeam, D. J. /2007). Handbook of plant nutrition. CRC, Hoboken. |
| | 4 | Wiedenhoeft, A. C. (2006). The Green World: Plant nutrition. Infobase Publishing. |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 02/02/2026 | Introduction to Plant Nutrition | 1, 2 |
| **Week 2** | 09/02/2026 | Essential plant nutrients and fertilizers | 1, 2 |
| **Week 3** | 16/02/2026 | Essential plant nutrients and fertilizers (continue) | 1, 2 |
| **Week 4** | 23/02/2026 | Roles of roots and nutrient uptake | 3 |
| **Week 5** | 02/03/2026 | Foliar nutrient applications | 3 |
| **Week 6** | 09/03/2026 | Importance of fertilizers in natural cycles | 3, 4 |
| **Week 7** | 16/03/2026 | Inorganic and organic fertilizers | 1, 4 |
| **Week 8** | 23/03/2026 | Compose and Liquid fertilizers | 1, 4 |
| **Week 9** | 30/03/2026 | Timing for fertilization | 1, 3 |
| **Week 10** | **04-12.04.2026** | ***Mid-term exam*** | |
| **Week 11** | 13/04/2026 | Nitgoren, Phosphorus and Potassium | 1, 3 |
| **Week 12** | 20/04/2026 | Calcium, Magnesium and Sulphur | 1, 3 |
| **Week 13** | 27/04/2026 | Iron, Zinc and Mangan | 1, 3 |
| **Week 14** | 04/05/2026 | Cuppoer, Boron and Molibdenium | 1, 3 |
| **Week 15** | 11/05/2026 | Fertigation Methods | 1, 3 |
| **Week 16** | **16-25.05.2026** | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | ***16-25.05.2026*** | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | ***04-12.04.2026*** | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 4 |
| TLH Self Study | 14 | 56 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 14 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 315 | Horticultural Techniques | Compulsory | 3 | 0 | 0 | 3 | 5 | Thursday 14:00-16:50 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 5th Semester | **Frequency:** each fall term | **Planned class size:** | 30 students | |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | **Duration:** | 1 semester | |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Prof. Dr. Mehmet Atilla Aşkın | **Office Hours Schedule:** | Thursday 09:00-11:00 |
| **E-mail** | maskin@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2502 / 0533 8751224 | **Office/Room No:** | AS 217 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | The objectives of this course are to give the students the technical information about plant propagation methods of various fruit and vegetable crops, pests and diseases management, orchard design, introduction to greenhouse construction and soilless culture methods. |
| **Learning Outcomes:** | 1. Learn basic principles of plant physiology and morphology to the reproduction of plants.<br>2. Learn plant propagation method for specific species.<br>3. Learn in vitro propagation techniques. |

| | | | |
|---|---|---|---|
| **Programme Outcome Relations** | **PO1: 5**<br>**PO2: 5**<br>**PO3: 3**<br>**PO4:4**<br>**PO5: 5**<br>**PO6: 4** | **PO7: 5**<br>**PO8: 4**<br>**PO9: 3**<br>**PO10: 5** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | American Horticultural Society Plant Propagation: The Fully illustrated Plant by Plant Manual of Practical Techniques by Alan Toogood, 1999. |
| | 2 | Propagation Techniques by Geoff Hodge and Rosemary Ward, 2012. |
| | 3 | Soilless Culture: Theory and Practice by Michael Raviv and J. Heinrich Lieth, 2007. |
| | 4 | Introduction to Fruit Crops (Crop Science) by Mark Rieger, 2006. |
| | 5 | Genel Meyvecilk. ISBA: 978-605-133-253-6. Nobel press. 2023 |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 02.10.2025 | what is plant propagation, definition of horticulture | 1.2.4.5 |
| **Week 2** | 09.10.2025 | sexual and asexual reproduction of plants | 1.2.4.5 |
| **Week 3** | 16.0.2025 | propagation by seeds | 1.2.3.4 |
| **Week 4** | 23.10.2025 | vegetative propagation techniques : stock division, sucker division, | 1.2.4.5 |
| **Week 5** | 30.10.2025 | vegetative propagation techniques : layering | 1.2.5 |
| **Week 6** | 06.11.2025 | propagation by cuttings, | 1.2.5 |
| **Week 7** | 08-16.11.2025 | **Mid-term exam** | |
| **Week 8** | 20.11.2025 | Budding and grafting | 1.2.5 |
| **Week 9** | 27.11.2025 | graft incompatability | 1.2.5 |
| **Week 10** | 04.12.2025 | invitro propagation | 1.2.3.4.5 |
| **Week 11** | 11.12.2025 | Pruning and training | 1.2.3.4.5 |
| **Week 12** | 18.12.2025 | propagation structures and containers | 1.2.3.4.5 |
| **Week 13** | 25.12.2025 | propagation soil and substrates | 1.2.3.4 |
| **Week 15** | 03-11.01.2026 | ***Final exam*** | 1.2.3.4.5 |
| **Week 16** | | | |

| Evaluation Tools | Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|---|
| | **Final Exam** | 1 | | 50 | 50 |
| | **Semester Evaluation** | | | 50 | |
| | **Midterm(s)** | 1 | | 50 | 50 |
| | **Quiz(zes)** | 0 | | 0 | 0 |
| | **Project(s)** | 0 | | 0 | 0 |
| | **Homework(s)** | 0 | | 0 | 0 |
| | **Laboratory** | 0 | | 0 | 0 |
| | **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 12 | 36 | Homework | 0 | 0 |
| TLH Self Study | 12 | 72 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 10 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 2 | 6 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 2 | 12 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 351 | Irrigation Techniques | Compulsory | 2 | 2 | 0 | 3 | 5 | *Tuesday, 09.00-12.50, AS217* |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 5th Semester | **Frequency:** | each fall term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assoc. Prof. Dr. İbrahim Kahramanoğlu | **Office Hours Schedule:** | *Monday 10:00-12:00; Wednesday 10:00-12:00* |
| **E-mail** | ikahramanoglu@eul.edu.tr | | |
| **Phone** | +90 392 660 2000 | **Office/Room No:** | *Institute office* |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

**Course Objectives:**
Main objectives of this course are to give the basic principles of irrigation, regarding climate, soil and plant factors. Determination of seasonal and total water requirements of various crop plants, methods of irrigation, undesirable consequences of irrigation and the need for drainage are some of the topics elaborated in this course. The expected outcomes of this course are the better understanding of crop production under irrigation, with respect to optimum crop yield, its impact on soil quality and to water economy. Development of salinity and sodicity will be discussed in some detail.

**Learning Outcomes:**
Learning outcomes of the lecture can be summerized as below:
1) Learning fundamentals of irrigation and soil & water relationships
2) Provide students with an understanding of the importance of irrigation and things need to be considered before designing of an irrigation system
3) Have detail information about the principles of irrigation scheduling and using of CropWAT program
4) Provide students with a knowledge of techniques used in irrigation
5) Provide students with a basic information about the automatic irrigations sytems and fertigation

**Programme Outcome Relations**

| | | |
|---|---|---|
| PO1: 3 | PO6: 2 | (1): Strongly disagree; |
| PO2: 3 | PO7: 1 | (2): Disagree; |
| PO3: 3 | PO8: 3 | (3): Neither agree nor disagree; |
| PO4: 1 | PO9: 3 | (4): Agree; |
| PO5: 5 | PO10: 2 | (5): Strongly agree. |

**Textbooks and/or References:**

| | |
|---|---|
| 1 | Merrett, S. (2001). Water for Agriculture: Irrigation Economics in International Perspective (1st Edition). CRC Press, 250p. |
| 2 | Venot, J.P., Kuper, M. and Zwarteveen, M. (2017). Drip Irrigation for Agriculture: Untold Stories of Efficiency, Innovation and Development (1st Edition). CRC Press, 358p. |
| 3 | Azhar, A.H., Ashraff, M., Ahmed, M. (2011). Modern irrigation techniques and technologies: Efficient Utilisation of Scarce Water Resources. VDM Verlag Dr. Müller, 168p. |
| 4 | FAO (2018). http://www.fao.org/land-water/databases-and-software/cropwat/en/ |
| 5 | Obaideen, K., Yousef, B. A., AlMallahi, M. N., Tan, Y. C., Mahmoud, M., Jaber, H., & Ramadan, M. (2022). An overview of smart irrigation systems using IoT. Energy Nexus, 100124. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 23/09/2025 | Histroy of Irrigation | 1, 2, 3 |
| **Week 2** | 30/09/2025 | Fundamentals of Irrigation | 1, 2, 3 |
| **Week 3** | 07/10/2025 | Soil & Water Management | 1, 2, 3 |
| **Week 4** | 14/10/2025 | Monitoring soil moisture and plant stress | 1, 2, 3 |
| **Week 5** | 21/10/2025 | Irrigation water management and irrigation scheduling | 1, 2, 3 |
| **Week 6** | 28/10/2025 | Using CropWAT program for irrigation scheduling | 1, 4 |
| **Week 7** | 04/11/2025 | Irrigation system components | 1, 4 |
| **Week 8** | ***08 - 16/11/2025*** | ***Mid-term exam*** | |
| **Week 9** | 18/11/2025 | Flow measurement and its importance | 1, 2, 3 |
| **Week 10** | 25/11/2025 | Irrigation types: border/furrow/basin/flood irrigation | 1, 2, 3 |
| **Week 11** | 02/12/2025 | Irrigation types: drip irrigation / sub-surface drip irrigation | 1, 2, 3 |
| **Week 12** | 09/12/2025 | Irrigation types: sprinkler irrigation | 1, 2, 5 |
| **Week 13** | 16/12/2025 | Irrigation types: micro-irrigation and center pivot irrigation | 1, 2, 5 |
| **Week 14** | 23/12/2025 | Irrigation systems, nutrient management and agricultural chemigation | 1, 2, 5 |
| **Week 15** | 30/12/2025 | Getting the most from your irrigation system | 1, 2, 5 |
| **Week 16** | ***03 - 11/01/2026*** | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 03 - 11/01/2026 | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 08 - 16/11/2025 | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 4 |
| TLH Self Study | 14 | 42 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 4 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 34 | FE preparation self study | 1 | 6 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 402 | Agriculture and the Environment | Elective | 3 | 0 | 0 | 3 | 5 | Thursday 14:00-17:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 8th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Murat Helvacı | **Office Hours** | Monday 14:00-17:00, Tuesday 09:00-12:00, Wednesday 09:00- |
| **E-mail** | mhelvaci@eul.edu.tr | **Schedule:** | 11:00;15:00-17:00, Friday 09:00-12:00;14:00-17:00 |
| **Phone** | 0 542 850 0336 | **Office/Room No:** | AS 240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | The purpose of the course is to let the students learn the possible destructive effects of agriculture on the environment |
| **Learning Outcomes:** | Purpose of the course can be summerized as below:<br>1- To understand interactions between agricultural production and the environment<br>2- To examine possible environmental impact of agricultural production inputs<br>3- To examine techniques employing agricultural production in combating environmental pollution<br>4- To examine Pollution prevention techniques |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| **PO1: 1** | **PO7: 3** | **(1) Strongly disagree;** |
| **PO2: 1** | **PO8: 1** | **(2) Disagree;** |
| **PO3: 5** | **PO9: 1** | **(3) Neither agree nor disagree;** |
| **PO4: 1** | **PO10: 1** | **(4) Agree;** |
| **PO5: 2** | | **(5) Strongly agree.** |
| **PO6: 4** | | |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Montagnini, F. (2018). Integrating Landscapes: Agroforestry for Biodiversity Conservation and Food Sovereignty. Germany: Springer International Publishing, 501p. |
| | 2 | Zaikov, G. E., Weisfeld, L. I., Lisitsyn, E. M. and Bekuzarova, S. A. (2017). Heavy Metals and Other Pollutants in the Environment. Taylor & Francis. ISBN 978-1-315-36602-9 |
| | 3 | Khan, S. U. (2016). Pesticides in the Soil Environment. Netherlands: Elsevier Science, 248p. |
| | 4 | Ahuja, M. R. and Jain, M. S. (2015). Genetic Diversity and Erosion in Plants. Springer International Publishing. ISBN 978-3-319-25635-1 |
| | 5 | Kumar, A., Kumar, D., Singh, j., Kumar, R. (2024).A Comprehensive Exploration of Soil, Water, and Air Pollution in Agriculture.(n.p.): BFC Publications. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 05.02.2026 | Greenhouse Effect | 1,16/5,9 |
| **Week 2** | 12.02.2026 | Negative Effects Of Intensive Farming On Living Organisms | 2,3/2,4/5,1/5,2/5,10 |
| **Week 3** | 19.02.2026 | Water Pollution | 2,3/5,15/5,19 |
| **Week 4** | 26.02.2026 | Soil Pollution | 2,1/5,12/5,17/5,18/5,19/5,23 |
| **Week 5** | 05.03.2026 | Air Pollution | 2,3/5,7/5,19/5,21 |
| **Week 6** | 12.03.2026 | Green Revolution - Global Warming | 1,1/1,2 - 1,16/5,9 |
| **Week 7** | 19.03.2026 | Bayram Holiday | |
| **Week 8** | 26.03.2026 | Heavy Metal Pollution on Soils | 2,2/2,3/5,22 |
| **Week 9** | 02.04.2026 | Acidification effects of nitrogen fertilizers/Salinization of Soils | 5,1/5,4/5,10-5,2/5,5/5,10 |
| **Week 10** | ***04-12 April 2026*** | ***Midterm(s)*** | |
| **Week 11** | 16.04.2026 | Green Energy | 1,13/5,16 |
| **Week 12** | 23.04.2026 | Public Holiday | |
| **Week 13** | 30.04.2026 | Pesticide Effects on Environment | 3,5/3,6/5,10 |
| **Week 14** | 07.05.2026 | Genetic Erosion | 3,4/3,9/3,10 |
| **Week 15** | 14.05.2026 | Biodiversity & Deforestration | 1,7/1,15/5,8 |
| **Week 16** | ***16-25 May 2026*** | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 16-25 May 2026 | 50 | 100 |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 04-12 April 2026 | 40 | 80 |
| **Quiz(zes)** | | | | |
| **Project(s)** | | | | |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | | | | |
| **Attendance** | | | | |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 0 | 0 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 1 | 4 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 404 | Viticulture | Compulsory | 2 | 2 | 0 | 3 | 5 | Tuesday / 14.00-17.00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 8th Semester | **Frequency:** | each spring term | **Planned class size:** | 20 |
| **Teaching methods:** | Lectures, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Turgut Alas | **Office Hours Schedule:** | re-announced each semester |
| **E-mail** | talas@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2576 | **Office/Room No:** | AS240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Grape is considered as the most valuable fruit with about 75 million-tons production in 7,5 million-hectares acreage ranked in top three fruits together with banana and orange, and its fruit is mainly used for wine (56 %), table (38 %) and raisin (6%) purposes. Although its acreage and production in Europe have been decreased constantly, world production has a tendency in slight increase since 2000. The aim of this course is to give beneficial knowledge and skills to undergraduate students on modern viticulture. The major topics of the course are ampelography, morphology and physiology of the grapevine, climate and soil requirements of grapevines, grapevine improvement, grapevine propagation, vineyard establishment and leading viticultural practices. |
| **Learning Outcomes:** | 1- History of viti-viniculture<br>2- Nutritional values and health benefits of grapes and grape products<br>3- Characteristics and geographical limits of species, grape and rootstock varieties<br>4- Functions of vegetative and generative organs and flower type-fruit set relations<br>5- Factors affecting vegetative and reproductive growth cycles<br>6- Aspects of site and soil selection for table, wine and raisin grape productions<br>7- Selection of rootstock and grape varieties for given location<br>8- Principle and practices of asexual (clonal) propagation of grapevine<br>9- Planning and techniques of vineyard establishment<br>10- Selection and practices of pruning and training systems considering climate, soil conditions, rootstock-grape variation |
| **Textbooks and/or References:** | 1 General Viticulture, Pierre Gallet, 2000, OENOPLURIMEDIA sarl, ISBN: 2-905 428-13-9. Chateau de Chaintre-71570 CHAITRE-FRANCE<br>2 From Vines to Wines, Jeff Cox, 1999, Story Books, ISBN: 1-58017-105-2, Canada |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 03.02.26 | Introduction | |
| **Week 2** | 10.02.26 | History and Origin of Vitiviniculture & Ampelography | 1, 1 |
| **Week 3** | 17.02.26 | World's Viticulture | 2, 1 |
| **Week 4** | 24.02.26 | Use of Vitis vinifera Varieties | 2, 5/2, 6 |
| **Week 5** | 03.03.26 | Use of American and Asian Species & Nutritional Value and Health Benefits of Grapes | 2, 5 |
| **Week 6** | 10.03.26 | Morphology of Grapevine, | 1, 2 |
| **Week 7** | 17.03.26 | Climate for Grapevines, Soil and Garpevine | 1, 4/2, 4/1, 5/2, 3 |
| **Week 8** | 24.03.26 | Climate for Grapevines, Soil and Garpevine | 1, 4/2, 4/1, 5/2, 3 |
| **Week 9** | 31.03.26 | Asexual Reproduction in Plants (Vegetative Propagation) | 1, 7/2, 9 |
| **Week 10** | 07.04.26 | ***Midterm Exam*** | |
| **Week 11** | 14.04.26 | Propagation of Grapevines | 1, 7/2, 9 |
| **Week 12** | 21.04.26 | Vineyard Establishment | 1, 8/2, 10 |
| **Week 13** | 28.04.26 | Grapevine Pruning | 1, 9 |
| **Week 14** | 05.05.26 | Grapevine Growth and Fruit Development | 1, 3/2, 7 |
| **Week 15** | 12.05.26 | Grapevine Pests and Diseases | 2, 11 |
| **Week 16** | | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 16-25 May 2026 | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 04-12 April 2026 | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 1 | 4 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 1 | 3 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 1 | 6 | FE preparation self study | 1 | 8 |
| | | | **TOTAL :** | | **159** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.30** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 408 | Greenhouse Productions | Compulsory | 2 | 2 | 0 | 3 | 5 | *Wednesday 12:00-14:00* |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 8th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Serhat Usanmaz | **Office Hours Schedule:** | |
| **E-mail** | susanmaz@eul.edu.tr | | |
| **Phone** | 0542 880 6373 | **Office/Room No:** | *AUÇ* |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Principles of greenhouse operation and management for production of horticultural crops; construction and operation of greenhouse structures and systems; regulating and controlling the environment and applying cultural practices as they affect plant physiological processes and influence plant growth and development; management of a greenhouse business. |
| **Learning Outcomes:** | 1) To provide basic information about greenhouse cultivation, giving information about cultivation techniques of some vegetable species (including tomatoes, watermelon, cucumber, eggplant, melon, peppers, etc.) grown under greenhouse and teaching the encountered problems and solutions<br>2) To gain basic information about the soil born diseases in greenhouses and how to manage it<br>3) Aim at improving the understandings of the students about environmental factors of greenhouse production systems and how to manage them |

**Textbooks and/or References:**

1. Mastalerz, J. W. (1977). The greenhouse environment. John Wiley & Sons..
2. Welbaum, G. E. (2015). Vegetable production and practices. CABI.
3. Nonnecke, I. L. (1989). Vegetable production. Springer Science & Business Media.
4. Maynard, D. N., & Hochmuth, G. J. (2006). Knott's handbook for vegetable growers. John Wiley & Sons.

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | Tomatoe production in Greenhouse | 1, 2, 3 |
| Week 2 | | Tomatoe production in Greenhouse (continue) | 1, 2, 3 |
| Week 3 | | Tomatoe production in Greenhouse (continue) | 1, 2, 3 |
| Week 4 | | Watermelon production in Greenhouse | 1, 2, |
| Week 5 | | Watermelon production in Greenhouse (continue) | 1, 2, |
| Week 6 | | Watermelon production in Greenhouse (continue) | 1, 2, |
| Week 7 | | Cucumber production in Greenhouse (continue) | 1, 2, 3 |
| Week 8 | | ***Mid-term exam*** | |
| Week 9 | | cucumber production in Greenhouse (continue) | 1, 2, 3 |
| Week 10 | | Eggplant production in Greenhouse | 1, 2, 3, 4 |
| Week 11 | | Eggplant production in Greenhouse (continue) | 1, 2, 3, 4 |
| Week 12 | | Melon production in Greenhouse | 1, 2, 3 |
| Week 13 | | Melon production in Greenhouse (continue) | 1, 2, 3 |
| Week 14 | | Peppers production in Greenhouse | 2, 3, 4 |
| Week 15 | | Peppers production in Greenhouse (continue) | 2, 3, 4 |
| Week 16 | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | | 60 | |
| Semester Evaluation | | | 40 | |
| Midterm(s) | 1 | | 40 | 100 |
| Quiz(zes) | 0 | | 0 | 0 |
| Project(s) | 0 | | 0 | 0 |
| Homework(s) | 0 | | 0 | 0 |
| Laboratory | 0 | | 0 | 0 |
| Attendance | 0 | | 0 | 0 |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 12 | 36 | Homework | 0 | 0 |
| TLH Self Study | 12 | 72 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 2 | 6 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 2 | 12 | FE preparation self study | 1 | 12 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 409 | Greenhouse Technologies | Compulsory | 2 | 2 | 0 | 3 | 5 | Wednesday 12:00-14:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | | n/a | |
| **Semester:** | 7th Semester | **Frequency:** | each fall term | **Planned class size:** | 30 students |
| **Teaching methods:** | | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Serhat Usanmaz | **Office Hours Schedule:** | |
| **E-mail** | susanmaz@eul.edu.tr | | |
| **Phone** | +90 392 660 2000 | **Office/Room No:** | Güzelyurt Research and Application Farm |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Design and use of enclosed structures to manipulate controlled environments, effects on growth as applied to crops, their production, will be introduced and elaborated in this course, with an emphasis on vegetable production |
| **Learning Outcomes:** | 1. To improve the knowledge of the students about design and use of greenhouse structures for manipulating controlled environments, by describing the greenhouse types, main construction skeleton and covering materials.<br>2. To give basic information about the importance of greenhouse and greenhouse selection for different climates, together with the economics and their efficiency.<br>3. To introduce the heating, cooling and ventilation systems of greenhouses.<br>4. To provide detailed information to the students about the types of polyethylenes (i.e. UV-added polyethylene) used as greenhouse covering materials |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| **PO1: 5** | | | |
| **PO2: 1** | **PO7: 2** | **(1) Strongly disagree;** | |
| **PO3: 4** | **PO8: 1** | **(2) Disagree;** | |
| **PO4: 3** | **PO9: 1** | **(3) Neither agree nor disagree;** | |
| **PO5: 4** | **PO10: 1** | **(4) Agree;** | |
| **PO6: 1** | | **(5) Strongly agree.** | |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | The Greenhouse Enviroment, by J.W.Mastalerz,1997 |
| | 2 | Principles and Species by Dole and Wilkins. 2005 |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 24.09.2025 | Introduction of Greenhouse Production | 1, 2 |
| **Week 2** | 01.10.2025 | Site Selection of Greenhouse | 1, 2 |
| **Week 3** | 08.10.2025 | Greenhouse Types, Designs and Construction | 1, 2 |
| **Week 4** | 15.10.2025 | Production Methods of Greenhouse | 1, 2 |
| **Week 5** | 22.10.2025 | Greenhouse Construction Equipments | 1,2 |
| **Week 6** | 29.10.2025 | Public Holiday | |
| **Week 7** | 05.11.2025 | Signal Sensors and Automation Systems | 1, 2 |
| **Week 8** | ***08-16 Nov. 2025*** | ***Midterm(s)*** | |
| **Week 9** | 19.11.2025 | Design and Development of Low Cost Greenhouse Structures | 1, 2 |
| **Week 10** | 26.11.2025 | Heating, Cooling and Ventilation of Greenhouses | 1, 2 |
| **Week 11** | 03.12.2025 | Greenhouse and different type of structures | 1, 2 |
| **Week 12** | 10.12.2025 | Efficient irrigation and fertigation management of high value cash crops under greenhouse | 1, 2 |
| **Week 13** | 17.12.2025 | Biological control of green house or glasshouse pests | 1, 2 |
| **Week 14** | 24.12.2025 | Soilless Culture | 1, 2 |
| **Week 15** | 31.12.2025 | Public Holiday | |
| **Week 16** | ***03-11 Jan. 2026*** | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 03-11 January 2026 | 60 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 08-16 November 2025 | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 0 | | 0 | 0 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 13 | 39 | Homework | 0 | 0 |
| TLH Self Study | 13 | 78 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 1 | 4 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 1 | 3 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 1 | 6 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-26 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI418 | Post-Harvest Physiology | Compulsory | 2 | 2 | 0 | 3 | 6 | Tuesday 09:00-10:50, AS119<br>Friday 09:00-10:50 Lab & Field |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 8th Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assoc. Prof. Dr. İbrahim Kahramanoğlu | **Office Hours Schedule:** | Monday 10:00-11:50, Wednesday 10:00-11:50 |
| **E-mail** | ikahramanoglu@eul.edu.tr | | |
| **Phone** | +90 392 660 2000 - 2845 | **Office/Room No:** | AS 238 & Institute 203 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

**Course Objectives:**
The objective of this course is to provide the student with a basic understanding of the Postharvest Physiology of harvested horticultural products. Understanding the quantitative factors affecting post-harvest losses of horticultural crops, including physiological and biochemical considerations, and compositional and physical changes occur during maturation and senescence. Also, to study commercial procedures of harvest, handling, packing, storage and marketing in relation to commodity requirements and responses.

**Learning Outcomes:**
Purpose of the course can be summarized as below:
1) Improve the students' understanding about the physiology of fresh products and learn why they deteriorate
2) Provide students with an understanding of the factors accelerating deterioration in fresh products
3) Teach the maturity indices and "things to consider before harvesting" to the students
4) Provide students with knowledge about how to prevent deterioration in fruits and vegetables after harvesting and learn how to increase the shelf life of fresh produce
5) Improve students' understanding about the innovative and eco-friendly methods in postharvest handling of fresh fruits and vegetables

**Programme Outcome Relations**

| | | |
|---|---|---|
| PO1: 1 | PO6: 4 | (1): Strongly disagree; |
| PO2: 1 | PO7: 5 | (2): Disagree; |
| PO3: 3 | PO8: 2 | (3) Neither agree nor disagree; |
| PO4: 2 | PO9: 4 | (4) Agree; |
| PO5: 1 | PO10: 1 | (5) Strongly agree. |

**Textbooks and/or References:**

| | |
|---|---|
| 1 | Kahramanoğlu, İ. (Ed.) (2023). Postharvest Physiology and Handling of Horticultural Crops. CRC Press, 380p. https://doi.org/10.1201/9781003452355 |
| 2 | Kahramanoğlu, İ (Ed.) (2017). Postharvest Handling. IntechOpen, edited book. |
| 3 | Thompson, A. K. (2008). Fruit and vegetables: harvesting, handling and storage. John Wiley & Sons. |
| 4 | Gross, K. C., Wang, C. Y., & Saltveit, M. E. (Eds.). (2016). The commercial storage of fruits, vegetables, and florist and nursery stocks. United States Department of Agriculture, Agricultural Research Service. |
| 5 | Kahramanoglu, İ. (Ed.). (2023). New Advances in Postharvest Technology. BoD–Books on Demand. |
| 6 | Fawole, O.A. & Kahramanoğlu, İ. (2026). Nanotechnology in Pre-and Postharvest Horticulture: Applications and Developments. CRC Press, 414p. |
| 7 | University of California, Postharvest Center: http://postharvest.ucdavis.edu/Commodity_Resources/Fact_Sheets/ |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 03/02/2026 | Post harvest physiology of fruits and vegetables & Biologial factors (respiration) of deterioration | 1, 2, 4, 5, 6 |
| Week 2 | 10/02/2026 | Biological factors causing deterioration in fresh products: Ethylene, Transpiration and Diseases & introduction to environmental factors (the temperature) | 1, 2, 3, 5 |
| Week 3 | 17/02/2026 | Environmental factors continue: Relative humidity, atmospheric composition and light | 1, 2, 5, 6 |
| Week 4 | 24/02/2026 | Maturity indices = Harvest indices | 1, 2, 3, 5 |
| Week 5 | 03/03/2026 | Harvesting & Postharvest Handling and Product Quality | 1, 2, 3, 5 |
| Week 6 | 10/03/2026 | Flavour and Aroma Biology; & Nutritional Value and Food Safety | 1, 2, 3, 5 |
| Week 7 | 17/03/2026 | Initial Cooling and Cold Storage & Packaging | 1, 2, 3, 5 |
| Week 8 | 24/03/2026 | Postharvest Handling: Fruits and Vegetables | 1, 3, 4, 5 |
| Week 9 | 31/03/2026 | Postharvest Handling: Leafy Vegetables | 1, 3, 4, 5 |
| Week 10 | 04-12.04.2026 | ***Mid-term Exam*** | |
| Week 11 | 14/04/2026 | Plant-based edible coatings for managing postharvest quality of fresh horticultural produce | 1, 2, 5, 6 |
| Week 12 | 21/04/2026 | Some important biomaterials: Propolis, Aloe vera, Chitosan and Gum arabic | 1, 2, 5 |
| Week 13 | 28/04/2026 | Light: An Alternative Method for Physical Control of Postharvest Rotting Caused by Fungi of Citrus | 1, 2, 5 |
| Week 14 | 05/05/2026 | Recommendations for Maintaining Postharvest Quality for some selected crops | 1, 3, 7 |
| Week 15 | 12/05/2026 | Fresh-cut Biology | 1, 5, 6, 7 |
| Week 16 | 16-25.05.2026 | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | ***16-25.05.2026*** | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | ***04-12.04.2026*** | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 6 |
| TLH Self Study | 14 | 56 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 42 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **180** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **6.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours | | | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| | | | T | A | L | | | |
| AGRI 425 | Organic Farming | Compulsory | 3 | 0 | 0 | 3 | 5 | Tuesday 09:00-12:00 |

| | | | |
|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a |
| **Semester:** | 7th Semester | **Frequency:** | each fall term |
| **Planned class size:** | 30 students | | |
| **Teaching methods:** | Lectures, assignment and discussions | **Duration:** | 1 semester |


| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Murat Helvacı | **Office Hours Schedule:** | Monday 14:00-17:00/Tuesday 14:00-17:00/Wednesday 09:00-12:00 & 14:00-17:00/Thursday 09:00-12:00 |
| **E-mail** | mhelvaci@eul.edu.tr | | |
| **Phone** | 0 542 850 0336 | **Office/Room No:** | AS 240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |


| | |
|---|---|
| **Course Objectives:** | The course aims to produce learners who are able to appreciate, practice and promote organic agriculture. |
| **Learning Outcomes:** | 1- Identify the ecological concepts and current issues in organic agriculture versus conventional farming<br>2- Demonstrate appropriate organic farming techniques and strategies used in crop and animal production<br>3- Plan strategies for marketing organic products and organic farm inputs<br>4- Recognize organic certification standards and procedures<br>5- Advocate for organic agriculture<br>6- Perform and develop skill in simple independent scientific inquiry to instill in them that science based decisions are important and urgent |
| **Programme Outcome Relations** | **PO1: 3**<br>**PO2: 1**<br>**PO3: 2**<br>**PO4: 4**<br>**PO5: 2**<br>**PO6: 5**<br>**PO7: 1**<br>**PO8: 2**<br>**PO9: 1**<br>**PO10: 1**<br>**(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Nandwani, D. (2016). Organic Farming for Sustainable Agriculture.Springer International Publishing.ISBN 978-3-319-26801-9.Switzerland. |
| | 2 | Vacante, V. and Kreiter, S. (2017). Handbook of Pest Management in Organic Farming. MA : CABI.ISBN-13: 978 1 78064 499 8, Boston |
| | 3 | Organic Farming: Global Perspectives and Methods. (2023). Birleşik Krallık: Elsevier Science. |
| | 4 | SAARC Good Agriculture Practices for Vegetables and Fruits in South Asia: Current Status and Future Opportunities. (2018). Bangladesh: SAARC Agriculture |
| | 5 | Somasundaram, E., Nandhini, D. U., Meyyappan, M. (2019). Principles of Organic Farming: (With Theory and Practicals). India: New India Publishing Agency. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 23.09.2025 | Definition and aims of Organic Farming-Comparision with Intensive Farming | 1.1/3.1/5.2 |
| **Week 2** | 30.09.2025 | Passive Plant Protection Methods in Organic Farming | 1.5/2.15/2.17/5.3/5.7 |
| **Week 3** | 07.10.2025 | Active Plant Protection Methods in Organic Farming | 1.5/2.15/2.17/5.3/5.7 |
| **Week 4** | 14.10.2025 | Organic Manures | 1.4/1.9/3.4/5.6 |
| **Week 5** | 21.10.2025 | Soil Cultivation and Preservation of Soil Fertility in Organic Farming | 1.4/1.9/3.4/5.6 |
| **Week 6** | 28.10.2025 | Compost and Composting Process | 1. 11 |
| **Week 7** | 04.11.2025 | Good Agricultural Practices (GAP) | 4.1/4.9/5.5 |
| **Week 8** | ***08-16 Nov. 2025*** | ***Midterm(s)*** | |
| **Week 9** | 18.11.2025 | Organic Fertilizers and Their Impacts on Crop Production | 1.4/1.9/3.4/5.6 |
| **Week 10** | 25.11.2025 | Current Developments in Organic Agriculture | 3.6/3.7/5.11 |
| **Week 11** | 02.12.2025 | The Past and Present of Organic Agriculture in the TRNC | 1.1/3.9/5.2 |
| **Week 12** | 09.12.2025 | Organic Agriculture in Turkey | 1.1/3.9/5.2 |
| **Week 13** | 16.12.2025 | Organic Agriculture Worldwide | 1.1/3.9/5.2 |
| **Week 14** | 23.12.2025 | Certification Process in Organic Farming | 3.6/3.7/5.11 |
| **Week 15** | 30.12.2025 | Organic Pest and Disease Control 1-2 | 1.5/2.15/2.17/5.3/5.7 |
| **Week 16** | ***03-11 Jan. 2026*** | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 03-11 January 2026 | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 08-16 November 2025 | 40 | 80 |
| **Quiz(zes)** | | | | |
| **Project(s)** | | | | |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | | | | |
| **Attendance** | | | | |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 13 | 39 | Homework | 1 | 4 |
| TLH Self Study | 13 | 78 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 1 | 3 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 1 | 6 | FE preparation self study | 1 | 10 |
| | | | | **TOTAL :** | **150** |
| | | | | **Recommended ECTS Credit (Total Hours / 30) :** | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 471 | Plant Breeding | Compulsory | 3 | 0 | 0 | 3 | 5 | Thursday / 14.00-16.50 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 7th Semester | **Frequency:** | each fall term | **Planned class size:** | |
| **Teaching methods:** | Lectures | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Turgut Alas | **Office Hours Schedule:** | Tuesday 10.00-12.00 |
| **E-mail** | talas@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2526 | **Office/Room No:** | AS240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

**Course Objectives:** Plant Breeding is one of the most interesting fields of Plant Sciences and have very important place in horticultural education programs. It is the art and science of changing the genetics of plants in order to produce new varieties with desired characteristics. Plant breeding can be accomplished through many different techniques ranging from simply selecting plants with desirable characteristics for propagation to more complex molecular techniques.Conventional and Modern Breeding Methods.

**Learning Outcomes:** Upon completion of this course the conscientious students should be able to;
1. Evaluate scientific literature related to crop improvement. Apply genetic and plant breeding principles to new problems. Demonstrate an understanding of basic plant breeding facts and principles.
2. Design appropriate crop improvement strategies for specific problems. Develop new plant breeding programmes and projects. Work in breeding projects and apply successfully appropriate plant breeding techniques .

**Textbooks and/or References:**

| | |
|---|---|
| 1 | Acquaah, G. 2007. Principles of Plant Genetics and Breeding. Blackwell Publishing Ltd, UK |
| 2 | Chahal,C. S., Gosal, S.S. 2009.Principles and Procedures of Plant Breeding: Biotechnological and Conventional Approaches. Narosa Publishing House, New |
| 3 | |
| 4 | |
| 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | History of Breeding | 1, 2 |
| Week 2 | | Center of Origins | 1, 2 |
| Week 3 | | Conventional Breeding Methods | 1, 2 |
| Week 4 | | Modern Breeding Methods | 2 |
| Week 5 | | Modern Breeding Methods | 2 |
| Week 6 | | Modern Breeding Methods | 2 |
| Week 7 | | Genetically Modified Organisms | 2 |
| Week 8 | | ***Midterm Exam*** | |
| Week 9 | | Molecular Markers | 2 |
| Week 10 | | Polymerase Chain Reaction | 2 |
| Week 11 | | Plant Tissue Culture Role in Breeding | 1, 2 |
| Week 12 | | Plant Tissue Culture Role in Breeding | 1, 2 |
| Week 13 | | Plant Tissue Culture Role in Breeding | 1, 2 |
| Week 14 | | Socio-economc Benefits and Risks of Biotechnology in Plant Breeding | 2 |
| Week 15 | | ***Final exam*** | |
| Week 16 | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | | 50 | |
| Semester Evaluation | | | 50 | |
| Midterm(s) | 1 | | 40 | 100 |
| Quiz(zes) | 0 | | 0 | 0 |
| Project(s) | 0 | | 0 | 0 |
| Homework(s) | 1 | | 10 | 0 |
| Laboratory | 0 | | 0 | 0 |
| Attendance | 0 | | 0 | 0 |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 0 | 0 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 12 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 481 | Citriculture | Compulsory | 2 | 2 | 0 | 3 | 5 | Friday / 09.00-11.50 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 7th Semester | **Frequency:** | each fall term | **Planned class size:** | |
| **Teaching methods:** | Lectures | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Turgut Alas | **Office Hours Schedule:** | Tuesday 10.00-12.00 |
| **E-mail** | talas@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2526 | **Office/Room No:** | AS240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Conventional and Modern Breeding Methods. Purpose of the course can be summerized as history and origin, taxonomic classification, morphological and biological characteristics of citrus. Also, information of World production and marketing of citrus fruits. |
| **Learning Outcomes:** | Upon completion of this course the conscientious students should be able to;<br>1. Meeting environmental requirements and limiting factors typical for citrus. Knowing the peculiarities of the morphology, anatomy, physiology and citrus systematic. Within each of the species and varieties of citrus important in World, its characteristics and its distribution.<br>2. Knowing the criteria-based selection of varieties and patterns. Determining the influence of certain natural factors in the citrus. |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Citrus Fruit Biology, Technology and Evaluation, Milind Ladinya, 2008. |
| | 2 | Biology of Citrus, Pinhas Spiegel-Roy, Cabridge University Press, 1996. |
| | 3 | |
| | 4 | |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | Citrus Botany | 1, 2 |
| Week 2 | | Citrus History | 1, 2 |
| Week 3 | | Citrus Classification | 1, 2 |
| Week 4 | | Swingle-Tanaka Taxonomy | 1, 2 |
| Week 5 | | Monoembryony, Nucellar Embryony in Citrus Seeds | 1, 2 |
| Week 6 | | Polyembryony in Citrus Seeds | 1, 2 |
| Week 7 | | Citrus Rootstocks | 1, 2 |
| Week 8 | | ***Midterm Exam*** | |
| Week 9 | | Citrus Rootstocks | 1, 2 |
| Week 10 | | Citrus Nutrition | 1, 2 |
| Week 11 | | Nutrient Deficiency and Toxicity in Citrus Production | 1, 2 |
| Week 12 | | Citrus Breeding | 1, 2 |
| Week 13 | | Citrus Nursery | 1, 2 |
| Week 14 | | Cultural Applications in Citrus Production | 1, 2 |
| Week 15 | | ***Final exam*** | |
| Week 16 | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | | 50 | |
| Semester Evaluation | | | 50 | |
| Midterm(s) | 1 | | 40 | 100 |
| Quiz(zes) | 0 | | 0 | 0 |
| Project(s) | 0 | | 0 | 0 |
| Homework(s) | 1 | | 10 | 0 |
| Laboratory | 0 | | 0 | 0 |
| Attendance | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 0 | 0 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 12 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 491 | Landscape Management | Elective | 3 | 0 | 0 | 3 | 5 | Friday 14:00-17:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 7th Semester | **Frequency:** | each fall term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Murat Helvacı | **Office Hours Schedule:** | Monday 14:00-17:00/Tuesday 14:00-17:00/Wednesday 09:00-12:00 & 14:00-17:00/Thursday 09:00-12:00 |
| **E-mail** | mhelvaci@eul.edu.tr | | |
| **Phone** | 0 542 850 0336 | **Office/Room No:** | AS 240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | Identify components of a successful landscape management; Distinguish and describe components of a landscape management contract; List procedures to identify, select, and acquire necessary landscape maintenance equipment; Discuss the importance of landscape design and its implications for landscape maintenance techniques and strategies; Describe water management techniques and practices to increase irrigation use efficiency; Discuss the use of fertilizer and application techniques; Describe bed preparation and plant installation techniques ;Describe management strategies for annuals, herbaceous perennials, &ornamental grasses in the landscape; Discuss the importance of sustainable landscape management practices and the need for environmental stewardship; Describe sustainable landscape management practices and techniques |
| **Learning Outcomes:** | 1-Demonstrate competency in sustainable landscape maintenance and installation activities, including: safe use of tools and equipment, operation of irrigation systems, pruning and training techniques, hardscape installation and reading/installing from a design plan;<br>2-Identify common woody and herbaceous plants in the landscape;<br>3-Recognize and evaluate key pests in the landscape and propose solutions based on IPM strategies;<br>4-Use a basic understanding of plant biology and soil science to make sound decisions in the design and maintenance of landscapes; |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| **PO1: 1**<br>**PO2: 3**<br>**PO3: 3**<br>**PO4: 2**<br>**PO5: 4**<br>**PO6: 1** | **PO7: 1**<br>**PO8: 1**<br>**PO9: 5**<br>**PO10: 1** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** | |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Efe, R., Cürebal, İ., Gad, A., & Toth, B. (Eds.). (2016). Environmental Sustainability and Landscape Management. St. Kliment Ohridski University Press |
| | 2 | Efe, R., Zencirkıran, M., Cürebal, İ., (Eds.). (2018). Recent Researches in Science and Landscape Management. Cambridge Scholars Publishing. |
| | 3 | Hart, C. D., Ivy, R. L. (2019). Landscape Design, Installation, and Management. United States: GOODHEART WILLCOX Company. |
| | 4 | Large-Scale Urban Parks on Post-Industrial Sites in Contemporary Urban Landscape Conceptions. (2023). (n.p.): MDPI AG. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 26.09.2025 | Introduction to Landscape Management | 3.1 |
| **Week 2** | 03.10.2025 | The Uses of Garden Flowers in Landscape Architecture Projects, Factors Influencing Their Selection, and Design Examples | 2.11/2.36/3.24 |
| **Week 3** | 10.10.2025 | Hard and Soft Landscape Elements | 2.9/2.32/3.13 |
| **Week 4** | 17.10.2025 | Landscape Structures I | 1.8/3.5/3.10 |
| **Week 5** | 24.10.2025 | Landscape Structures II | 1.8/3.5/3.10 |
| **Week 6** | 31.10.2025 | Landscaping | 1.8/3.5/3.10 |
| **Week 7** | 07.11.2025 | Principles of Landscape Design | 1.6/1.11/3.6 |
| **Week 8** | ***08-16 Nov. 2025*** | ***Midterm(s)*** | |
| **Week 9** | 21.11.2025 | Elements of Landscape Design | 1.11/1.21/3.6/3.10 |
| **Week 10** | 28.11.2025 | Preventive Design | 2.6 |
| **Week 11** | 05.12.2025 | Urban Landscape | 1.45 |
| **Week 12** | 12.12.2025 | Urban Landscape to Accomodate Trees Sidewalk Solutions | 1.45/4.1,1/4.1,2/4.1,3 |
| **Week 13** | 19.12.2025 | Urban Design to Accommodate Trees Parking Solutions | 1.45/1.1/4.1,2 |
| **Week 14** | 26.12.2025 | Illustrated list of Ornamental Plants — Center for the Study of the Built Environment | 2.11/2.36/3.24 |
| **Week 15** | 02.01.2026 | Roots After Planting/Landscape Maintenance | 3.10/3.14/3.22 |
| **Week 16** | ***03-11 Jan. 2026*** | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 03-11 January 2026 | 50 | |
| **Semester Evaluation** | | | 40 | |
| **Midterm(s)** | 1 | 08-16 November 2025 | 40 | 80 |
| **Quiz(zes)** | | | | |
| **Project(s)** | | | | |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | | | | |
| **Attendance** | | | | |

****** Lifelong Learning Programme (LLP) ******

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 12 | 36 | Homework | 1 | 4 |
| TLH Self Study | 12 | 72 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 2 | 6 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 2 | 12 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 492 | Floriculture | Elective | 3 | 0 | 0 | 3 | 5 | Thursday 09:00 -11:50 AM |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 8th Semester | **Frequency:** | each spring term | **Planned class size:** | 20 students |
| **Teaching methods:** | Lectures, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Prof. Dr. Mehmet Atilla Aşkın | **Office Hours Schedule:** | Thursday 14:00 -17:30 PM |
| **E-mail** | maskin@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2502 / 0533 8751224 | **Office/Room No:** | Dean office |
| **Teaching Assistant:** | +90 392 7143495 | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | 1.Principles of fruit production, emphasizing on temperate zone and subtropical fruits are the main subject of this course. Within this course integrated management of temperate and subtropical fruit cropping systems including site selection, cultural and management practices, taxonomic classifications, physiological and environmental control of plant development will be covered. Subject matter will include orchard establishment and production methods. 2.To provide students with a comprehensive understanding of the principles and practices involved in floriculture, including the historical and economic significance of the industry. 3. To enable students to identify various floricultural plants, including annuals, perennials, bulbs, and flowering shrubs, and understand the criteria for selecting appropriate species for different purposes and environments. |
| **Learning Outcomes:** | 1. Learn Plant Identification and Classification: Students will be able to accurately identify and classify a wide range of floricultural plants, including annuals, perennials, bulbs, and flowering shrubs, using botanical terminology and classification systems., 2. Learn Application of Cultivation Techniques: Students will demonstrate proficiency in the essential techniques of floricultural crop cultivation, such as soil preparation, planting, fertilization, irrigation, pruning, and pest management. 3. Learn Floral Design and Arrangement Skills: Students will be able to create aesthetically pleasing floral designs and arrangements, utilizing principles of design, color theory, and knowledge of different flower and foliage types. 4. Learn Understanding of Sustainable Practices: Students will demonstrate an understanding of sustainable and environmentally friendly practices in floriculture, including the use |

| | | | |
|---|---|---|---|
| **Programme Outcome Relations** | **PO1: 5**<br>**PO2: 5**<br>**PO3: 3**<br>**PO4:4**<br>**PO5: 5**<br>**PO6: 4** | **PO7: 5**<br>**PO8: 4**<br>**PO9: 3**<br>**PO10: 5** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Introduction to Floriculture Editor: Roy A. Larson Publisher: Academic Press ISBN: 9780124077917 Year: 2013 |
| | 2 | The Floriculture Industry Author: R. L. Sheela Publisher: New India Publishing Agency ISBN: 9789380235953 Year: 2011 |
| | 3 | Süs Bitkileri Üretim Tekniği Yazar: Necdet Oral Yayın Evi: Ege Üniversitesi Ziraat Fakültesi Yayınları ISBN: 9789754838964 Yıl: 2016 |
| | 4 | |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 05.02.26 | Introduction to Floriculture | 1, 2, 3 |
| **Week 2** | 12.02.26 | Classification of flowers | 1, 2, 3 |
| **Week 3** | 19.02.26 | Cutting Flowers: Rose Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 4** | 26.02.26 | Carnation Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 5** | 05.03.26 | Gerbera Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 6** | 12.03.26 | Chrysanthemum Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 7** | 19.03.26 | Indoor ornamental plants: Orchid Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 8** | 26.03.26 | **Midterm** | |
| **Week 9** | 02.04.26 | Calathea Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 10** | 09.04.26 | Zamioculus Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 11** | 16.04.26 | Outdoor ornamental plants: Dahlia Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 12** | **23.04.26** | **Bayram** | |
| **Week 13** | 30.04.26 | Shrubs and hedge plants | |
| **Week 14** | 07.05.26 | Zinnia Cultivation: Importance and Propagation | 1, 2, 3 |
| **Week 15** | 14.05.26 | Petunia Cultivation: Importance and Propagation | 1, 2, 3 |
| | 16-25.05.26 | **Final examFinal exam** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | | 50 | 50 |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | | 30 | 30 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 20 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 1 | 4 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 6 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **150** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.00** |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRIXX5(AGRI31 ) | Agricultural Policy | Compulsory | 3 | 0 | 0 | 3 | 5 | Wednesday / 14.00-17.00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 6th Semester | **Frequency:** | each spring term | **Planned class size:** | 25 |
| **Teaching methods:** | Lectures, assignments and discussion | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Asst. Prof. Dr. Turgut Alas | **Office Hours Schedule:** | re-announced each semester |
| **E-mail** | talas@eul.edu.tr | | |
| **Phone** | +90 392 660 2000-2576 | **Office/Room No:** | AS240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | This course aims to introduce agricultural policies in an economy in theory and in practice to the students that they will need in their professional or academic career. Basic microeconomic and macroeconomic principles are adopted to the agricultural issues. Furthermore, trends in the world agricultural developments are also studied during the semester. |
| **Learning Outcomes:** | 1. Effect of Industrial Revolution onto teh agriculture and environment.<br>2. Agriculture, and international agricultural organizations, agricultural policies including common agricultural policies of the EU, agricultural policies in North Cyprus and Turkey.<br>3. Impact of agriculture and human activities onto the environmental policies.<br>4. Rural development policies and cooperation in agriculture. |

| | | |
|---|---|---|
| **Textbooks and/or References:** | 1 | Agricultural Policies in Developing Countries, Frank Ellis, 1992 |
| | 2 | The Costs of the Common Agricultural Policies, A. Buckwell, K. A. Parton, D. R. Harvey, K. J. Thomson, 1982 |
| | 3 | Handbook of International Food and Agricultural Policies. William H Meyers, Thomas Johnson, Donna H Roberts , and Karl Meilke, 2018 |
| | 4 | |
| | 5 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 04.02.26 | Introduction to the policy | 1 |
| **Week 2** | 11.02.26 | Industrial revolution and its effects on environment | 1, 2 |
| **Week 3** | 18.02.26 | Role and importance of agricultural sector in environmental conditions | 1, 2 |
| **Week 4** | 25.02.26 | Global Warming, Climate Change | 1, 2 |
| **Week 5** | 04.03.26 | Agricultural Revolution | 1, 2 |
| **Week 6** | 11.03.26 | Effects of Agricultural Revolution on to the Environment | 1, 2 |
| **Week 7** | 18.03.26 | Water Crisis, 3R Concept | 1, 2 |
| **Week 8** | 25.03.26 | Human Activities, Green Revolution, Effects of Agriculture on the Environment | 1, 2 |
| **Week 9** | 01.04.26 | Socio-econıomic importance of rural development projects | 1, 2 |
| **Week 10** | | ***Midterm Exam*** | |
| **Week 11** | 15.04.26 | Sustainable agricultural policies | 1, 3 |
| **Week 12** | 22.04.26 | Sustainable agricultural policies | 1, 3 |
| **Week 13** | 29.04.26 | EU Common Agricultural Policy (CAP) | 1, 3 |
| **Week 14** | 06.05.26 | Cooperation in Agriculture | 1, 3 |
| **Week 15** | 13.05.26 | Air Pollution, Soil Pollution, Water Pollution | 1, 2 |
| **Week 16** | | ***Final exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 16-25 May 2026 | 50 | |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 04-12 April 2026 | 40 | 80 |
| **Quiz(zes)** | 0 | | 0 | 0 |
| **Project(s)** | 0 | | 0 | 0 |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | 0 | | 0 | 0 |
| **Attendance** | 0 | | 0 | 0 |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 42 | Homework | 1 | 3 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quiz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 0 | 0 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 0 | 0 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **151** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5.03** |

# EUROPEAN UNIVERSITY OF LEFKE - Faculty of Economics & Administrative Sciences

**Department of Busines Administration**

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| UFEC/CFE 201 | Leadership and Management | | 3 | 0 | | 3 | 4 | Thursday: 18:00-20:50 / HK001 |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Lec. Sıdıka İskeleli | Office Hours Schedule | Monday: 11:00-13:50 |
| E-mail | siskeleli@eul.edu.tr | | |
| Phone | 2610 | Office / Room No | FEAS 10 |

| | |
|---|---|
| Catalog Description | In this course, an analysis of theoretical and practical knowledge is made. In this context, basic social and psychological factors associated with the concept of leadership and current theories will be explained and how theoretical knowledge can be applied in terms of leadership and management functions in organizations will be emphasized. The aim of the course is to provide students with a deep understanding of leadership and management concepts and to develop their own leadership skills. |
| Course Objectives | To provide students with a variety of learning experiences related to the theory and practice of leadership.<br>To enable students to develop a personal leadership profile.<br>To analyze both traditional leadership models and current leadership research findings.<br>To examine the importance of motivation, value development, and change management in organizations. |
| Learning Outcomes | 1. Describe the concept of leadership and effective leadership theories<br>2. Distinguish between managerial processes, traits & skills<br>3. Identify the effective use of power & influence in organizations<br>4. Recognize leading change in organizations |

| | | |
|---|---|---|
| Textbooks and/or References | 1 | Leadership in organizations / Gary Yukl and William Gardner, Pearson Education, 2020 |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | Introduction | |
| Week 2 | | The Nature of Leadership | Chapter 1 |
| Week 3 | | Leadership Behavior | Chapter 2 |
| Week 4 | | The Leadership Situation and Adaptive Leadership | Chapter 3 |
| Week 5 | | Decision Making and Empowerment by Leaders | Chapter 4 |
| Week 6 | | Leading Change and Innovation | Chapter 5 |
| Week 7 | | Leader Traits and Skills | Chapter 7 |
| Week 8 | | Charismatic and Transformational Leadership | Chapter 8 |
| Week 9 | | Revision | |
| Week 8 | | **Mid Term Exam Week : Chapters: 1-2-3-4-5-7** | |
| Week 9 | | Values-Based and Ethical Leadership | Chapter 9 |
| *Week 10* | | Leadership in Teams and Decision Groups | Chapter 11 |
| Week 11 | | Strategic Leadership in Organizations | Chapter 12 |
| Week 12 | | Cross-Cultural Leadership and Diversity | Chapter 13 |
| Week 13 | | Developing Leadership Skills | Chapter 14 |
| Week 16 | | **Final Exams** | **All Chapters** |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | **16 / 25 May 2026** | 60 | 60.0 |
| **Semester Evaluation** | | | | |
| **Midterm(s)** | 1 | **14 March / 12 April 2026** | 40 | 40.0 |
| **Quiz(zes), Participation** | | | | |
| **Project(s)** | | | | |
| **Homework(s)** | | | | |
| **Laboratory** | | | | |
| **Other** | | | | |

*** *Lifelong Learning Programme (LLP)* *** Language of Instruction: **English**

| Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|
| Theoretical Hours | 15 | 45.0 |
| Midterm | 1 | 1.0 |
| self-study MT | | |
| self-study cases | | |
| self-study quizzes | | |
| | | |
| | | |

| Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|
| Applied Hours | | |
| Final | 1 | 1.0 |
| Self-study - Final | | |
| Homework | | |
| Seminar | | |
| Presentation | | |
| Self Study | 37 | 74.0 |
| **TOTAL :** | 60 | 121.0 |
| **Recommended ECTS Credit (Total Hours / 30) :** | | 4.03 ≅ 4 |

# EUROPEAN UNIVERSITY OF LEFKE

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Title | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| CFE202 | Environment and Sustainable Development | Compulsory | 3 | 0 | 0 | 3 | 4 | Fridays 15.00-17.50 (ORTAAMFİ) |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Asst. Prof. Dr. Semih OĞUZCAN | Office Hours Schedule | Monday 10.00-11.50 /Tuesday 13.00-14.50 /Friday 14.00-14.50 |
| E-mail | soguzcan@eul.edu.tr | | |
| Phone | | Office / Room No | AS310 |
| Teaching Assistant | | Phone | |
| E-mail | | Office / Room No | |

| | |
|---|---|
| Catalogue Descriptions | Ecology and sustainability, biodiversity, urbanization, ecological succession, climate and biodiversity, sustaining biodiversity, sustaining resources and environmental quality: food production, water resources and pollution, mineral sources, energy sources, environmental hazards and human health, air pollution, ozone depletion, cllimate change, solid and hazardous wastes |
| Objectives | The purpose of this course is to give brief information about nature and environment along with sustainability concept. Help students gain awareness about environmental problems. It is aimed to inform students about daily practices that will lead to a more sustainable living. |
| Learning Outcomes | On successful completion of the course, the student will be able to:<br>(1) understand environmental problems<br>(2) construct relationship between ecology, biodiversity and sustainability<br>(3) apply principles of sustainability on various environmental issues<br>(4) understand sustainable resources management: water, energy, minerals<br>(5) understand how resource consumption affect air pollution and climate change<br>(6) understand advantages and disadvantages of different strategies in solid waste management |

| Programme Outcome Relations | | | |
|---|---|---|---|
| | PO1: 1<br>PO2: 1<br>PO3: 1<br>PO4: 1<br>PO5: 1<br>PO6: 4 | PO7: 3<br>PO8: 3<br>PO9: 1<br>PO10a: 5<br>PO11a: 5 | (1) Strongly disagree;<br>(2) Disagree;<br>(3) Neither agree nor disagree;<br>(4) Agree;<br>(5) Strongly agree. |

| Textbooks and/or References | | |
|---|---|---|
| | 1 | G. Tyler Miller, Scott Spoolman,«Environmental Science», 15th Edition, Cengage Learning, 2016 (Textbook) |
| | 2 | Jefferson W. Tester, Elisabeth M. Drake, Michael J. Driscoll, Michael W. Golay, and William A. Peters, «Sustainable Energy Choosing Among Options»,2nd Edition, MIT Press, 2012 . (Reference) |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 06/02/2026 | Introduction: environmental problems and sustainability, matter, energy and systems | 1: 1, 2 |
| Week 2 | 13/02/2026 | Ecosystems | 1: 3 |
| Week 3 | 20/02/2026 | Biodiversity | 1: 4, 5 |
| Week 4 | 27/02/2026 | The human population and urbanization | 1: 6 |
| Week 5 | 06/03/2026 | Climate change and biodiversity | 1: 7 |
| Week 6 | 13/03/2026 | Sustaining biodiversity | 1: 8, 9 |
| Week 7 | tbd | Food production and environment | 1: 10 |
| Week 8 | 27/03/2026 | Water resources and water pollution | 1: 11 |
| Week 9 | 03/04/2026 | Nonrenewable mineral resources | 1: 12 |
| Week 10 | 04-12/04/2026 | Midterms | |
| Week 11 | 17/04/2026 | Energy resources | 1: 13 |
| Week 12 | 24/04/2026 | Environmental hazards and human health | 1: 14 |
| Week 13 | tbd | Air pollution, climate change and ozone depletion | 1: 15 |
| Week 14 | 08/05/2026 | Solid and hazardous waste | 1: 16 |
| Week 15 | 15/05/2026 | Revision | |
| Week 16 | 16-25/05/2026 | **Final Exam** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | 16-25/05/2026 | 60 | |
| Semester Evaluation | | | 40 | |
| Midterm(s) | 1 | 04-12/04/2026 | 35 | 70.0 |
| Quiz(zes) | | | | |
| Project(s) | 1 | 30/04/2026 | 5 | 8.3 |
| Homework(s) | | | | |
| Laboratory works | | | | |
| Attendance | | | | |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecturing hours (TLH) | 13 | 39 | Homework | | |
| TLH self study | 13 | 52 | Project | 1 | 6 |
| Quiz (Q) | | | Presentation | | |
| Q preparation self study | | | Seminar | | |
| Laboratory (L) | | | | | |
| L preparation work | | | | | |
| Midterm exam (ME) | 1 | 2 | Final exam (FE) | 1 | 2 |
| ME preparation self study | 1 | 10 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | 121 |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | 4 |

# EUROPEAN UNIVERSITY OF LEFKE

## SYLLABUS
## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| COM101 | English 1 | | 3 | 0 | 0 | 3 | 3 | |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Mehmet Mert | Office Hours Schedule | Monday 09:00-11:00 |
| E-mail | mmert@eul.edu.tr | | |
| Phone | | Office / Room No | AS232 |
| Teaching Assistant(s) | - | Phone | 2684 |
| E-mail | - | Office / Room No | - |

| | |
|---|---|
| Course Objectives | This course introduces the main grammatical structures to the students and helps them to develop their listening, speaking , reading and writing skills as well as vocabulary and pronunciation. The students are provided with clear rules and example sentences. The lessons contain high frequency vocabulary that the students are likely to come across during their studies and future their future careers |
| Learning Outcomes | 1.The students will be able to understand and use English structures accurately to express themselves.<br>2. The students will be able to learn and use the vocabulary learnt during the lessons. |
| Textbooks and/or | 1 English File, Intermediate Plus, Student's Book, Christina Latham- Koenig, et al, Oxford University Press, Third Edition |
| | 2 English File, Pre-Intermediate Plus, Workbook, Christina Latham- Koenig, et al, Oxford University Press, Third Edition |

| WEEK | Date | TOPICS | Reference no to learning outcomes |
|---|---|---|---|
| Week 1 | | Pronouns | 1.2 |
| Week 2 | | Making adjectives | 1.2 |
| Week 3 | | Adjectives | 1.2 |
| Week 4 | | Adjective Suffixes | 1.2 |
| Week 5 | | Modals of deduction | 1.2 |
| Week 6 | | Holidays | 1.2 |
| Week 7 | | Possessives, shops, services | 1.2 |
| Week 8 | | Past Simple / Continuous, used to, stages of life | 1.2 |
| Week 9 | | **MID TERMS** | |
| Week 10 | | Passives | 1.2 |
| Week 11 | | kinds of films | 1.2 |
| Week 12 | | future forms, rubbish and recycling | 1.2 |
| Week 13 | | 1st-2nd conditionals, applying for a job-course | 1.2 |
| Week 14 | | Present Perfect Simple, TV (phrasal verbs) | 1.2 |
| Week 15 | | Present Perfect Continuous, Types of TV prog. | 1.2 |
| Week 16 | | **FINALS** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | | 60 | 100 |
| **Semester Evaluation** | | | | |
| **Midterm(s)** | 1 | | 40 | 100.0 |
| **Quiz(zes)** | | | | |
| **Project(s)** | | | | |
| **Online Homework(s)** | | | | |
| **Laboratory** | | | | |
| **Other** | | | | |

*** *Lifelong Learning Programme (LLP)* *** | Language of Instruction: **English**

| Evaluation Tool | Quantity | Student Workload Hours | |
|---|---|---|---|
| Theoretical Hours | 13 | 13x3 | 39 |
| Midterm | 1 | 1x1 | 1 |
| Self Study for midterm | 1 | 39x1 | 39 |
| Final Exam | 1 | 1x1 | 1 |
| Self Study for final | 1 | 10x1 | 10 |
| | | **TOTAL :** | 90 |
| | | **Recommended ECTS Credit (Total Hours / 25) :** | 90/30=3 |

# EUROPEAN UNIVERSITY OF LEFKE

## SYLLABUS

## 2025-2026 FALL SEMESTER

| Course Code | Course Title | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| COM109 | BASIC MATHEMATICS I | Compulsory | 3 | 0 | 0 | 3 | 5 | WEDNESDAY 15:00-17:50 |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Aslı BARDAK | Office Hours Schedule | TUESDAY-12:00-14:50 |
| E-mail | abardak@eul.edu.tr | | |
| Phone | | Office / Room No | AS 304 |
| Teaching Assistant | | Phone | |
| E-mail | | Office / Room No | |

| | |
|---|---|
| Catalogue Descriptions | Repetition of basic algebra, fractions and partial fractions. The basic algebra and linear equations, arithmetic expression and simplification of algebraic expressions. Operations with surds and indices. Methods for solving logarithmic functions. The techniques for solving quadratic functions. Graph sketching for quadratic equations in Cartesian plane. Solving linear, polynomial and rational inequalities. The parallel and perpendicular lines. |
| Objectives | Students will be able to model and solve real-world situations found in a business environment using a variety of methods of mathematics. End of this course, student be able to learn algebraic expressions, real numbers, equations and inequalities, systems of equations. It includes also includes Pascal's triangle, exponential numbers, logarithms, and linear geometry issues. |
| Learning Outcomes | On successful completion of this course, all students will have developed knowledge and understanding of:<br>(1) Ability of simplified the algebraic functions<br>(2) Use the graph to illustrate business mathematical techniques<br>(3) Ability to understand Rational numbers, surds and solving the equations<br>(4) Ability to unerstand exponential numbers and logarithms<br>(5) Ability to understand equations and inequalities |

| Textbooks and/or References | | |
|---|---|---|
| | 1 | Ernest F. Haeussler, Jr. Richard S. Paul. Introductory Mathematical Analysis, Prentice Hall, 2002 |
| | 2 | Frank S. Budnick, Applied Mathematics for Business, Economics and The Social Sciences, 1994, McGraw Hill |
| | 3 | Margaret L. Lial, Raymond N. Greenwell, Nathan P. Ritchey Finite Mathematics and Calculus with Applications, 10/E, Pearson, 2016 |
| | 4 | L. Bostock, S. Chandler. Core Maths for A Level, Stanley Thornes (Publishers) LTD, 1994 |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | Introduction to algebraic expressions | 2:1.1, |
| Week 2 | | Introduction to algebraic expressions | 2:1.1, |
| Week 3 | | Quadratic Equations | 3:R.1,2 |
| Week 4 | | Pascal's triangle | 3:R.2 |
| Week 5 | | Fractions and Partial Fractions | |
| Week 6 | | Rules for Surds and Indices | 3:R.3 |
| Week 7 | | Introducing the Square root's rules | 3:R.6,7 |
| Week 8 | | midterm week | |
| Week 9 | | Logarithmic rules and evaluating logarithmic expression | 2:7.3 |
| Week 10 | | Equations and Quadratic Equations | 2:4.1,4.2,6.1 |
| Week 11 | | Function properties, inverse functions | 02:05.1 |
| Week 12 | | Solving composite functions | 2:3.1 |
| Week 13 | | Linear Inequalities | 2:1.3, 3:R.5 |
| Week 14 | | Quadratic Inequalities and Inequalities Systems | 2:1.3, 3:R.5 |
| Week 15/16 | | Final Exam week | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | | 50 | 50.0 |
| Semester Evaluation | | | 50 | |
| Midterm(s) | 1 | | 50 | 50.0 |
| Quiz(zes) | | | | |
| Project(s) | | | | |
| Homework(s) | | | | |
| Laboratory work(s) | | | | |
| Attendance | | | | |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecturing hours (TLH) | 13 | 39 | Homework | | |
| TLH self study | 13 | 78 | Project | | |
| Quiz (Q) | | | Presentation | | |
| Q preparation self study | | | Seminar | | |
| Laboratory (L) | | | | | |
| L preparation work | | | | | |
| Midterm exam (ME) | 1 | 2 | Final exam (FE) | 1 | 2 |
| ME preparation self study | 1 | 14 | FE preparation self study | 1 | 22 |
| | | | | **TOTAL :** | 157 |
| | | | | **Recommended ECTS Credit (Total Hours / 30) :** | 5.23 |

# EUROPEAN UNIVERSITY OF LEFKE

## Faculty of Engineering

## SYLLABUS

## 2025-2026 FALL

| Course Code | Course Title | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| COM121 | PHYSICS | Compulsory | 3 | 0 | 0 | 3 | 4 | |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Mehmet Burhan | Office Hours Schedule | Monday: 09:00-12:00 |
| E-mail | mburhan@eul.edu.tr | | |
| Phone | 3502 | Office / Room No | AS308 |
| Teaching Assistant | | Phone | |
| E-mail | | Office / Room No | |

| | |
|---|---|
| Catalogue Descriptions | This course aims to introduce fundamental concepts of physics for engineering science and to provide essential background for students. The course provides deep understanding of thermodynamics, electricity and magnetism. Also, the course aims to show the students the applications of the course material. |
| Objectives | The main aim of this course is to introduce the fundamental concepts of thermodynamics, electricity and magnetism necessary for science and to provide essential background for students. |
| Learning Outcomes | On successful completion of this course, all students will have developed knowledge and understanding of:<br>(1) an ability to translate, interpret and extrapolate important scientific models and laws governing classical mechanics,<br>(2) an ability to demonstrate critical thinking and problem solving skills in the area of physics,<br>(3) an ability to perform mathematical modeling of basic problems and establish their analytic solutions in field of classical mechanics,<br>(4) an understanding of the connection of course material to applications. |

| Programme Outcome Relations | | | |
|---|---|---|---|
| | PO1: 5<br>PO2: 5<br>PO3: 1<br>PO4: 1<br>PO5: 1<br>PO6: 1 | PO7: 1<br>PO8: 1<br>PO9: 1<br>PO10: 1<br>PO11: 1 | (1) Strongly disagree;<br>(2) Disagree;<br>(3) Neither agree nor disagree;<br>(4) Agree;<br>(5) Strongly agree. |

| Textbooks and/or References | | |
|---|---|---|
| | 1 | Serway, Physics for Scientists and Engineers with Modern Physics, 9/e |
| | 2 | Halliday and Resnick, Fundamentals of Physics |
| | 3 | Sears and Freedman, University Physics, 10/e |
| | 4 | Gettys, Keller and Skove, Physics: Classical and Modern |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | Introduction | |
| Week 2 | | Kinematics In One Dimension: Distance, displacement, average velocity, average acceleration, instan. Velocity and acceleration | 1:19.1,19.2,19.3,19.4,19.5 |
| Week 3 | | Kinematics in One Dimension with constant acceleration: ,<br>motion on x-axis and Properties of motion on y-axis | 1:20.1,20.2,20.3,20.4,20.5,20.6,20.7 |
| Week 4 | | Vectors: Unit Vector Representation and Matematical Operations with Vectors | 1:21.1,21.2,21.3,21.4,21.5 |
| Week 5 | | Kinematics in Two Dimension: Properties of Projectile Motion | 1:22.1,22.2,22.3,22.4,22.6,22.7 |
| Week 6 | | Laws of Motion: First, Second and Third Law of Newton | 1:23.1,23.2,23.3,23.4,23.5,23.6 |
| Week 7 | | Applications of Newton's Laws | 1:24.1, 24.2,24.3, 24.4 |
| Week 8 | | MIDTERM(S) | 1:25.1,25.2,25.3,25.4 |
| Week 9 | | Dynamics of Circular Motion | |
| Week 10 | | Work and Energy | 1:29.1,29.2,29.3,29.4,29.5 |
| Week 11 | | Definition of Mechanical Energy, Potential Energy, Kinetic Energy and Conservation of Mechanical Energy | 1:30.1,30.2,30.3 |
| Week 12 | | Heat and Temperature | 1:30.5,30.6 |
| Week 13 | | Kinetic Theory | 1:31.1,31.2,31.3,31.4, 31.4,31.5 |
| Week 14 | | Review | |
| Week-15/16 | | FINALS | |

| Evaluation Tools | Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|---|
| | Final Exam | 1 | | 50 | 50.0 |
| | Semester Evaluation | | | | |
| | Midterm(s) | | | 30 | |
| | Quiz(zes) | | | | |
| | Project(s) | | | | |
| | Homework(s) | | | 20 | |
| | Laboratory work(s) | | | | |
| | Attendance | | | | |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecturing hours (TLH) | 13 | 39 | Homework | | |
| TLH self study | 13 | 50 | Project | | |
| Quiz (Q) | 1 | 0.5 | Presentation | | |
| Q preparation self study | 1 | 4 | Seminar | | |
| Laboratory (L) | | | Tutorial | | |
| L preparation work | | | | | |
| Midterm exam (ME) | 1 | 2 | Final exam (FE) | 1 | 1.5 |
| ME preparation self study | 1 | 10 | FE preparation self study | 1 | 12 |
| | | | | **TOTAL :** | 119 |
| | | | | **Recommended ECTS Credit (Total Hours / 30) :** | 3.97 |

**COURSE DESCRIPTION**

**COMN253-STAT253 Statistics**

| Course | Code | Semester | T+P Hours | Credit | ECTS |
|---|---|---|---|---|---|
| Statistical Methods I | COMN-STAT253 | 2025-2026 FALL | 2+1 | 3 | 5 |

| | |
|---|---|
| **Prerequisite** | Non |

| | |
|---|---|
| **Course Language** | English |
| **Course Type** | Compulsory |
| **Course Level** | Year 1-Undergraduate |
| **Course Coordinator** | - |
| **Course Lecturer** | Assist.Prof.Dr.Hüseyin S. Mahmutoğlu |
| **Course Assistant** | - |
| **Course Objectives** | The main purpose of the course is to introduce basic statistics for behavioural sciences. It also aims to help students to gain conceptual understanding of statistics within the context of research. |
| **Course Content** | Basic Statistics, Frequency distributions, Percentile, Measures of Central Tendency, Measures of Variability, Correlation, Random Sampling, Hypothesis Testing |

| Course Learning Outcomes | Program Learning Outcomes | Teaching Methods | Evaluation Methods |
|---|---|---|---|
| to understand the basic concepts and terms used in statistics at introductory level | 1, 2, 3, 4, 5,6,7, 8, 9, 10, 11, 12, 13,14,15 | 1,2 | A |
| to be familiar with basic principles needed to understand statistical procedures, statistical procedures.. | 1, 2, 3, 4, 5,6,7, 8, 9, 10, 11, 12, 13, 14,15 | 1,2 | A |

| | | | |
|---|---|---|---|
| to interpret results based on the research methods and statistical procedures used to analyze the data. | 1, 2, 3, 4, 5,6,7, 8, 9, 10, 11, 12, 13, 14,15 | 1,2 | A |
| to apply the basic principles of statistic and appropriate | 1, 2, 3, 4, 5,6,7, 8, 9, 10, 11, 12, 13, 14,15 | 1,2 | A |

| | |
|---|---|
| **Teaching Methods:** | 1: Lecture, 2: Discussion, 3: Seminar, 4: Research, 5: Case Study/ Role Play, 6: Problem Solving, 7: Guess Lecturer |
| **Evaluation Methods:** | A: Exam, B: Written Homework, C: Presentation, D: Research, E: Debate, F: Quiz, G: Attendance |

**WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES**

| WEEK | SUBJECTS | PREPARATION STUDIES |
|---|---|---|
| 1 | Introduction to Statistics | Resource(R).1-2 |
| 2 | Statistics and Research Process | R. 1-2 |
| 3 | Statistics and Research Process cont. | R. 1-2 |
| 4 | Frequency Distributions | R. 1-2 |
| 5 | Measures of Central Tendency: The Mean, Median & Mode | R. 1-2 |
| 6 | Measures of Variability: Range, Variance, Standard Deviation | R. 1-2 |
| 7 | Correlation | R. 1-2 |
| 8 | Random Sampling | |
| 9 | Midterm exam | |
| 10 | Binominal Distribution | R. 1-2 |
| 11 | Normal Distribution | R. 1-2 |
| 12 | Introduction to Hypothesis Testing | R. 1-2 |
| 13 | Type I and Type II Error | R. 1-2 |
| 14 | Review and discussion | |
| 15 | Final exam | |

**Sources**

| | |
|---|---|
| **Course Notes / Textbooks** | 1) Heiman, G. (2011). Basic Statistics for the Behavioral Sciences, 6th ed. Canada: Cengage Learning.<br>2) Pagano, R.R. (2009). Understanding Statistics in the Behavioral Sciences, 9th. Canada: Cengage Learning.<br>3) Prem, S. Mann (2011), Introductory Statistics international Student version. 7th Edition. Asia: John Wiley and Sons.<br>4) Johnson/Kuby Inst Ed.Stat(2012): Cengage Learning Customers & Sales. |
| **Other resources** | Academic Journals, Articles |

| **SHARED MATERIAL** | |
|---|---|
| **Documents** | Handouts of lecture notes, articles |
| **Homework** | |
| **Exams** | |

| **EVALUATION SYSTEM** | | |
|---|---|---|
| **SEMESTER REQUIREMENTS** | **NUMBER** | **PERSENTAGE OF GRADE** |
| Midterm Exam | 1 | 40 |
| Quizzes | | |
| Homework Assignments | 1 | 10 |
| **Total** | | 50 |
| **Percentage of Final Work** | | 50 |
| **Percentage of Semester Work** | | 50 |
| **Total** | | **100** |
| **Course Category** | Core Course | |

| **THE RELATIONSHIP BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM** |
|---|

| QUALIFICATIONS | | | | | | | |
|---|---|---|---|---|---|---|---|
| # | Program Qualifications/Outcomes | * Level of Contribution | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | |
| | 1. To know philosophical and historical development of psychology area, including basic concepts, various theory and practice schools, and to have basic knowledge regarding basic theories and application areas for various sub fields of psychology as clinical, experimental, social, developmental, industrial, health, traffic, and educational psychology. | | | | | X | |
| | 2. To know related regulations and/or professional and ethical values regarding domains of psychology. To use theoretical and applied knowledge in accordance with the principles of professional and research ethics of psychology; committed to ethic responsibility and principles of the psychology profession. | | | | | X | |
| | 3. To notice the contributions of the basic approaches and perspectives of psychology to the other disciples and interdisciplinary perspectives. | | | | | X | |
| | 4. To generate research questions; problem solving via scientific methods and evaluate data by using knowledge of psychology domain. | | | | X | | |
| | 5. To acquire knowledge and skill to apply theoretical knowledge into practice in various fields of psychology. | | | | | X | |
| | 6. To acquire skills regarding data collection, analysis via appropriate statistics, and interpretation of handled results. | | | X | | | |
| | 7. To acquire skills regarding reporting research results according to scientific writing format. | | | | | X | |
| | 8. To acquire basic skills regarding prediction, description, formulation and solution of cognitive, emotional and behavioural processes related problems of individuals. | | | | | X | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 9. To have basic level of knowledge/skills regarding observation and interviewing technics. | | | X | | |
| | 10. To have basic level of knowledge/skills regarding psychological assessment and measurement tools. | | | X | | |
| | 11. To be able to develop and study research tools as scale, test or inventories and be able to use them at research studies. | | | X | | |
| | 12. To have proficiency regarding information and communication technologies to access to the knowledge and to spread knowledge. | | | | | X |
| | 13. To be able to use acquired knowledge, skills and proficiencies to prepare, and administer field studies and to analyse, have results and to apply these results into practice. | | | | X | |
| | 14. To possess the understanding that the differences regarding age, sex, race, ethnic group, national identity, religion, sexual orientation, disability, and socio-economic status shouldn't cause to prejudice. | | | | | X |
| | 15. To have knowledge regarding environmental, economic and social sustainability and awareness and ability to interpret the projections of the sustainability to various areas. | | | | X | |

*1 Lowest, 2 Low, 3 Average, 4 High, 5 Highest

**ECTS / WORKLOAD TABLE**

| Activities | Number | Duration (hours) | Total Workload (hours) |
|---|---|---|---|
| Course Hours (Including Exam Week: 14 x Total Hours) | 14 | 3 | 42 |
| Out of Class Workload (Preperatory work, reinforcement) | | | 58 |
| Midterm Exam | 1 | | 15 |
| Quizzes | | | |
| Homework Assignments | 1 | | 10 |
| Final Exam | 1 | | 25 |
| **Total Workload** | | | 150 |
| **Total Workload/ 30 (h)** | | | 5.3 |
| **ECTS Credit of Course 150/30=5** | | | **5** |

# EUROPEAN UNIVERSITY OF LEFKE

## Faculty of Engineering

## SYLLABUS

## 2025-2026 FALL SEMESTER

| Course Code | Course Title | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| COMN111 | CHEMISTRY | Compulsory | 3 | | | 3 | 4 | Thursday 12:00-14:50 (HK000) |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Assist. Prof. Dr. Devrim ÖZDAL | Office Hours Schedule | Tuesday 11:00-12:00 |
| E-mail | devrimozdal@eul.edu.tr | | |
| Phone | 2516 | Office / Room No | Faculty of Engineering / Room No : AS307 |
| Teaching Assistant | | Phone | |
| E-mail | | Office / Room No | |

| | |
|---|---|
| Catalogue Descriptions | The aim of this course is to describe students how substances interact with one another. Students will be informed on how the atom is made up, how atoms come together to make molecules and how molecules can interact, chemical compounds, chemical bonds, chemical equations and reactions, aqueous solutions, periodic table, gases, the electronic structure of the atom. |
| Objectives | The aim of this course is to deliver basic general chemistry content and introduce students to the chemistry laboratory. Matter, atomic structure, periodic table, mole concept. stoichiometry, aqueous solutions, and gasses. |
| Learning Outcomes | On successful completion of the course, the student will be able to:<br>(1) understand and carryout calculations on properties of Substances<br>(2) learn atomic structure and naming of compuounds<br>(3) learn mole concept, balancing equations, stoichiometry<br>(4) carry out calculations on aqueous reactions<br>(5) learn ideal gasses, gas mixtures and gas properties<br>(6) understand electronic configurations and covalent bonding<br>(7) understand concentration units of solutions, principles of solubility and colligative properties of nonelectrolytes |

| Programme Outcome Relations | | | |
|---|---|---|---|
| PO1: 4<br>PO2: 1<br>PO3: 1<br>PO4: 1<br>PO5: 3<br>PO6: 1 | PO7: 1<br>PO8: 1<br>PO9: 1<br>PO10: 1<br>PO11: 1 | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** | |

| Textbooks and/or References | | |
|---|---|---|
| | 1 | William L. Masterton, Cecile N. Hurley, Chemistry Principles and Reactions, 8th edition, Cengage Learning, 2016. |
| | 2 | Nivaldo J. Tro, Chemistry: A Molecular Approach, 5th ed., Pearson Education Limited, 2021. |
| | 3 | K.M.Whitten, R.E.Davis, M.L.Pech, G.G.Stanley, Chemistry, 10th ed., Brooks/Cole CENGAGE Learning, 2014. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 22-26.09.2025 | Matter and Measurements; Classifications of matters and Units in measurements | 1: 1.1-1.2 |
| Week 2 | 29.09.- | Matter and Measurements; Properties of Substances and Density | 1: 1.3 |
| Week 3 | 06-10.10.2025 | Atoms, Molecules and Ions; Atom theories and Subatomic particles | 1: 2.1-2.4 |
| Week 4 | 13-17.10.2025 | Atoms, Molecules and Ions; Properties of Periodic table and Structural formulas | 1: 2.4, 2.6 |
| Week 5 | 20-24.10.2025 | Atoms, Molecules and Ions; Naming of Ionic and Covalent Compounds | 1: 2.7 |
| Week 6 | 27-31.10.2025 | Mass Relations in Chemistry: Stoichiometry ; Moles, mole-gram conversions and Reactions | 1: 3.1-3.3 |
| Week 7 | 03-07.11.2025 | Mass Relations in Chemistry; Writing and Balancing Chemical equations, Limiting Reactant, Theoretical and Experimental Yield, Percent Yield | 1: 3.3-3.7 |
| Week 8 | ***10-14.11.2025*** | ***Midterm Exam Week*** | |
| Week 9 | 17-21.11.2025 | Mass Relations in Chemistry; Writing and Balancing Chemical equations, Limiting Reactant, Theoretical and Experimental Yield, Percent Yield | 1: 3.3-3.7 |
| Week 10 | 24-28.11.2025 | Reactions in Aqueous Solutions | 1:4.1-4.7 |
| Week 11 | 01-05.12.2025 | Gases; Measurements of gases, Ideal gas law, Gas mixtures | 1: 5.1-5.7 |
| Week 12 | 08-12.12.2025 | Electronic Structure and Periodic Table | 1: 6.1-6.7 |
| Week 13 | 15-19.12.2025 | Solutions; Concentration Units, Properties of Solubility | 1: 10.1-10.7 |
| Week 14 | 22-26.12.2025 | Revision | All Topics |
| Week 15 | 29-31.12.2025 | *Public Holiday* | |
| Week 16 | 05.09.01.2026 | ***Final Exam Week*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | 03-11.01.2026 | 50 | |
| Semester Evaluation | | | 50 | |
| Midterm(s) | 1 | 08-16.11.2025 | 50 | 100.0 |
| Quiz(zes) | | | | |
| Project(s) | | | | |
| Homework(s) | | | | |
| Laboratory works | | | | |
| Attendance | | | | |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecturing hours (TLH) | 14 | 42 | Homework | | |
| TLH self study | 14 | 42 | Project | | |
| Quiz (Q) | | | Presentation | | |
| Q preparation self study | | | Seminar | | |
| Laboratory (L) | | | Tutorial | | |
| L preparation work | | | | | |
| Midterm exam (ME) | 1 | 2 | Final exam (FE) | 1 | 2 |
| ME preparation self study | 1 | 10 | FE preparation self study | 1 | 12 |
| | | | **TOTAL :** | | 110 |
| | | | **Recommended ECTS Credit (Total Hours / 25) :** | | 4.4 |

# EUROPEAN UNIVERSITY OF LEFKE

## Faculty of Economics and Administrative Sciences

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| COM112/ COMN107 | Economics | Compulsory | 3 | 0 | | 3 | 6 | |
| Prerequisite | None | | | | | None | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Asst. Prof. Dr. Berna Serener | Office Hours | |
| E-mail | bserener@eul.edu.tr | | |
| Phone | 2608 | Office / Room No | FEAS Room 8 |
| Catalogue Description | This course introduces students to the key concept and topic of microeconomics such as opportunity cost, production possibility frontier, demand and supply, elasticity, utility, preferences, production, costs, perfect competition, monopoly. | | |
| Course Objectives | This course introduces students to the key concept and topic of microeconomics such as opportunity cost, production possibility frontier, demand and supply, elasticity, utility, preferences, production, costs, perfect competition, monopoly. | | |
| Learning Outcomes | On successful completion of this course, all students will have developed knowledge and understanding of:<br>(1) Supply and Demand Analysis,<br>(2) Elasticities,<br>(3) Production,<br>(4) Costs,<br>(5) Market Structures (6) Presentation of economic issues with graphs, tables and essays. | | |
| Textbooks and/or References | 1 M. Parkin, Economics, 14th Edition, Pearson, 2023. | | |
| | 2 N. G. Mankiw, Principles of Economics, 10th Edition, 2023. | | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | | What is Economics? Definition of economics-Two big economic questions | 1; 1 |
| Week 2 | | What is Economics? (cont.) The economic way of thinking-Economics as social science and policy tool | 1; 1 |
| Week 3 | | The Economic Problem: Production possibilities and opportunity cost | 1; 2 |
| Week 4 | | Demand and Supply | 1; 3 |
| Week 5 | | Demand and Supply | 1; 3 |
| Week 6 | | Elasticity | 1; 4 |
| Week 7 | | Holiday | |
| Week 8 | | Elasticity | 1; 4 |
| Week 9 | | Government Actions in Markets: A housing market with a rent ceiling-A labour market with a minimum wage | 1; 6 |
| Week 10 | | Midterm Exam | |
| Week 11 | | Output and Costs | 1; 11 |
| Week 12 | | Market Structures | 1; 12,13,14,15 |
| Week 13 | | Holiday | |
| Week 14 | | Review | |
| Week 15 | | Exam Week | |

| Evaluation Tools | Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|---|
| | Final Exam IN CLASS | 1 | | 60 | |
| | Midterm Exam IN CLASS | 1 | | 40 | |
| | Quiz on moodle | | | | |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecturing hours (TLH) | 11 | 11x3= 33 | Homework | | |
| TLH self study | 11 | 11x5 = 55 | Project | | |
| Quiz (Q) | | | Presentation | | |
| Preperation for Quiz | | | Seminar | | |
| Midterm Exam | 1 | 1 | Final Exam | 1 | 1 |
| Midterm Exam preparation self study | 1 | 40 | Final Exam preparation self | 1 | 50 |
| | | | **TOTAL :** | | 180 |

# EUROPEAN UNIVERSITY OF LEFKE

## BIOCHEMISTRY

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Title | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| COMN114 | Biochemistry | Compulsory | 3 | 0 | 0 | 3 | | Friday 12:00-15:00 |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Asst. Prof. Dr. Osman Dadaş | Office Hours Schedule | |
| E-mail | odadas@eul.edu.tr | | |
| Phone | | Office / Room No | ECZ020 |
| Teaching Assistant | | Phone | |
| E-mail | | Office / Room No | |

| | |
|---|---|
| Catalogue Descriptions | This module aims to introduce how biomolecules are produced structurally and what their functions are. Metabolic pathways and several biochemically relevant diseases are discussed throughout the module. Concepts of solubility in water, pH differences and how these properties can affect the structure and function of biomolecules are also discussed. |
| Objectives | To understand chemical bonds in biology and how molecules are made up. To understand the importance of water and principles of solubility and buffers. To become familiar with acid, base and pH concepts. To understand the structure and function of nucleic acids, carbohydrates, lipids and proteins. To understand the principles of enzymes, their mechanism of action, importance of enzyme structure, regulation of enzymes, enzyme kinetics and enzyme inhibition mechanisms. To learn about metabolism with a focus on carbohydrate metabolism to produce energy within the body. To understand the concepts of how excess energy is stored within living organisms and how glucose could be produced from non-carbohydrate precursors. |
| Learning Outcomes | Upon successful completion of the course, students will be able to:<br>1. Understand chemical bonds in biology and how molecules are built<br>2. Understand the importance of water and principles of solubility, buffers and acid/base concepts.<br>3. Understand the structure and function of biomolecules.<br>4. Understand the function and principles of enzymes.<br>5. Understand the concepts of metabolism and energy production and utilization. |

| Programme Outcome Relations | | | |
|---|---|---|---|
| | **PO1:** | **PO7:** | **(1) Strongly disagree;** |
| | **PO2:** | **PO8:** | **(2) Disagree;** |
| | **PO3:** | **PO9:** | **(3) Neither agree nor disagree;** |
| | **PO4:** | **PO10a:** | **(4) Agree;** |
| | **PO5:** | **PO10b:** | **(5) Strongly agree.** |
| | **PO6a:** | **PO11:** | |
| | **PO6b:** | | |

| Textbooks and/or References | | |
|---|---|---|
| | 1 | Harper's Illustrated Biochemistry - Thirty Second Edition |
| | 2 | Lecture Notes |
| | 3 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 06.02.2026 | Introduction to Biochemistry | 1,2 |
| Week 2 | 13.02.2026 | Chemical bonds in biology | 1,2 |
| Week 3 | 20.02.2026 | Water, solubility and pH | 1,2 |
| Week 4 | 27.02.2026 | Structure and function of carbohydrates | 1,2 |
| Week 5 | 06.03.2026 | Structure and function of nucleic acids | 1,2 |
| Week 6 | 13.03.2026 | Structure and function of lipids | 1,2 |
| Week 7 | 20.03.2026 | National Holiday | 1,2 |
| Week 8 | 27.03.2026 | Amino acids | 1,2 |
| Week 9 | 03.04.2026 | Protein structure | 1,2 |
| Week 10 | 04-12.04.2026 | Midterm Exams | |
| Week 11 | 17.04.2026 | Enzymes - regulation and inhibition mechanisms | 1,2 |
| Week 12 | 24.04.2026 | Introduction to metabolism and glycolysis | 1,2 |
| Week 13 | 01.05.2026 | Citric acid cycle and oxidative phosphorylation | 1,2 |
| Week 14 | 08.05.2026 | Excess glucose storage and gluconeogenesis mechanisms | 1,2 |
| Week 15 | 15.05.2026 | Course Review and Revision | |
| Week 16 | 16-25.05.2026 | Final Exams | |

| Evaluation Tools | Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|---|
| | Final Exam | 1 | | 60 | |
| | Semester Evaluation | | | 40 | |
| | Midterm(s) | 1 | | 40 | 100.0 |
| | Quiz(zes) | | | | |
| | Project(s) | | | | |
| | Homework | | | | |
| | Laboratory works | | | | |
| | Attendance | | | | |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecturing hours (TLH) | 14 | 42 | Homework | | |
| TLH self study | 14 | 28 | Project | | |
| Quiz (Q) | | | Presentation | | |
| Q preparation self study | | | Seminar | | |
| Laboratory (L) | | | Tutorial | | |
| L preparation work | | | | | |
| Midterm exam (ME) | 1 | 1 | Final exam (FE) | 1 | 1 |
| ME preparation self study | 1 | 8 | FE preparation self study | 1 | 10 |
| | | | | **TOTAL :** | 90 |
| | | | | **Recommended ECTS Credit (Total Hours / 30) :** | 3.00 |

# EUROPEAN UNIVERSITY OF LEFKE

## SYLLABUS
## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| COM110 | English 2 | | 3 | 0 | | 3 | 3 | |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Mehmet Mert | Office Hours Schedule | Monday 09:00-11:00 |
| E-mail | mmert@eul.edu.tr | | |
| Phone | | Office / Room No | AS232 |
| Teaching Assistant(s) | - | Phone | 2684 |
| E-mail | - | Office / Room No | - |
| Course Objectives | This course introduces the main grammatical structures to the students and helps them to develop their listening, speaking , reading and writing skills as well as vocabulary and pronunciation. The students are provided with clear rules and example sentences. The lessons contain high frequency vocabulary that the students are likely to come across during their studies and future their future careers | | |
| Learning Outcomes | 1.The students will be able to understand and use English structures accurately to express themselves.<br>2. The students will be able to learn and use the vocabulary learnt during the lessons. | | |
| Textbooks and/or | 1 English File, Intermediate Plus, Student's Book, Christina Latham- Koenig, et al, Oxford University Press, Third Edition | | |
| | 2 English File, Intermediate Plus, Workbook, Christina Latham- Koenig, et al, Oxford University Press, Third Edition | | |

| WEEK | Date | TOPICS | Reference no to learning outcomes |
|---|---|---|---|
| Week 1 | | Obligation, Necessity | 1.2 |
| Week 2 | | Prohibition, advice, DIY | 1.2 |
| Week 3 | | can, could, be able to | 1.2 |
| Week 4 | | vocabulary, things on the table | 1.2 |
| Week 5 | | Phrasal verbs | 1.2 |
| Week 6 | | verb patterns | 1.2 |
| Week 7 | | have something done | 1.2 |
| Week 8 | | at the hairdresser's | 1.2 |
| Week 9 | | **MID TERMS** | |
| Week 10 | | Passive | 1.2 |
| Week 11 | | Reported Speech | 1.2 |
| Week 12 | | Past Perfect | 1.2 |
| Week 13 | | be,do,have | 1.2 |
| Week 14 | | Auxiliary + main verbs | 1.2 |
| Week 15 | | Question tags | 1.2 |
| Week 16 | | **FINALS** | |

| Evaluation Tools | Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|---|
| | **Final Exam** | 1 | | 60 | 100 |
| | **Semester Evaluation** | | | | |
| | **Midterm(s)** | 1 | | 40 | 100.0 |
| | **Quiz(zes)** | | | | |
| | **Project(s)** | | | | |
| | **Online Homework(s)** | | | | |
| | **Laboratory** | | | | |
| | **Other** | | | | |

*** *Lifelong Learning Programme (LLP)* *** Language of Instruction: **English**

| Evaluation Tool | Quantity | Student Workload Hours | |
|---|---|---|---|
| Theoretical Hours | 13 | 13x3 | 39 |
| Midterm | 1 | 1x1 | 1 |
| Self Study for midterm | 1 | 39x1 | 39 |
| Final Exam | 1 | 1x1 | 1 |
| Self Study for final | 1 | 10x1 | 10 |
| | | **TOTAL :** | 90 |
| | | **Recommended ECTS Credit (Total Hours / 25) :** | 90/30=3 |

# EUROPEAN UNIVERSITY OF LEFKE

## COMMON COURSES

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Title | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| COMN180 | COMPUTER LITERATURE | Compulsory | 3 | 0 | 0 | 3 | 5 | Mondays 18:00-20:50 |
| Prerequisite | | Prerequisite to | | | | None | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Assist. Prof. Dr. Önder Onursal | Office Hours Schedule | Tuesdays 10:00 - 11:00, Fridays 14:00 - 16:00 |
| E-mail | oonursal@eul.edu.tr | | |
| Phone | 660 2000 2787 | Office / Room No | AS103 |
| Teaching Assistant | | Phone | |
| E-mail | | Office / Room No | |

| | |
|---|---|
| Catalogue Descriptions | This course focuses on the computer applications which are necessary for every student to be able to use during his/her undergraduate study. Students will be covering the basic components of computers, such as Random Access Memory (RAM), Read Only Memory (ROM) and Central Processing Unit (CPU), relationship between these hardwares. Students will be able differentiate between different types of operating systems, application softwares and web-based applications. Students learn basic information about network connection and the types. Except those information, each student will learn how to save himself/herself against the viruses. All topics support the learning environment by lab sessions and each student will be able to use office applications. |
| Objectives | The main purpose of this course is to provide students with an understanding of the basics of Computer System Unit and to teach the computer applicatin software tools uesd in modern Computing environment. |
| Learning Outcomes | LO1 To have knowledge of current information technology devices<br>LO2 To have knowledge of computer components and their functions<br>LO3 To have knowledge of the internet and networks<br>LO4 To develop an understanding of web usage and security issues<br>LO5 To have knowledge of application software such as Word and PowerPoint and their use |

| Textbooks and/or References | | |
|---|---|---|
| | 1 | Shelly Cashman Vermaat, Discovering Computers Essentials, 1st. ed. [ISBN 9781337285117] 2018 |
| | 1 | Discovering Computers: Digital Technology, Data, and Devices (MindTap Course List) [ISBN-13978-0357675366] 2022 |
| | 2 | Shelly Cashman Vermaat, Discovering Computers Fundamentals, 3rd ed. [ISBN 1-4188-4372-5] 2007 |
| | 3 | Larry Long and Nancy Long, Computers IT in Perspective 10th ed. [ISBN 0-13-009479-X] 2002. |
| | 4 | Shelly Cashman Vermaat, Office 2003, Premium ed. [ISBN 1-4188-5932-X] 2007 |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 22/09/2025 | Introduction | 2: 4--9 scv |
| Week 2 | 29/09/2025 | Types of Computers / Mobile Devices | 2:18--34 scv |
| Week 3 | 06/10/2025 | Input Devices and Output Devices | 2:188--219 scv |
| Week 4 | 13/10/2025 | Memory and Storage | 1:290--296 scv / 1:368--395 scv |
| Week 5 | 20/10/2025 | Components of System Unit | 1:276--302 csv |
| Week 6 | 27/10/2025 | System Software | 1:409--435 csv |
| Week 7 | 03/11/2025 | Application Software / Word Processing Software | 4: 140--172 scv |
| Week 8 | 08-16/11/2025 | Midterm(s) | |
| Week 9 | 17/11/2025 | Communications and Networks / Presentation Software | 2:10--18 scv |
| Week 10 | 24/11/2025 | Communication Devices / The Internet and the Web | 3: 72--97 scv |
| Week 11 | 01/12/2025 | Types of Web Sites | 1:71--84 scv |
| Week 12 | 08/12/2025 | Types of Websites / Digital Media on the web | 2: 256--289 scv |
| Week 13 | 15/12/2025 | Digital Security, Ethics and Privacy | 1:212--247 scv |
| Week 14 | 22/12/2025 | Word Processing Software | Lecture Notes |
| Week 15 | 29/12/2025 | Presentation Software | Lecture Notes |
| Week 16 | 03-11/01/2026 | Final Exam | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | 03-11/01/2026 | 50 | 50.0 |
| Semester Evaluation | | | 50 | |
| Midterm(s) | 1 | 08-16/11/2025 | 50 | 50.0 |
| Quiz(zes) | | | | |
| Project(s) | | | | |
| Homework(s) | | | | |
| Laboratory work(s) | | | | |
| Attendance | | | | |

*** *Lifelong Learning Programme (LLP)* ***

**Language of Instruction:** English

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecturing hours (TLH) | 14 | 42 | Homework | | |
| TLH self study | 14 | 56 | Project | | |
| Quiz (Q) | | | Presentation | | |
| Q preparation self study | | | Seminar | | |
| Laboratory (L) | | | | | |
| L preparation work | | | | | |
| Midterm exam (ME) | 1 | 24 | Final exam (FE) | 1 | 2 |
| ME preparation self study | | | FE preparation self study | 1 | 25 |
| | | | **TOTAL :** | | 149 |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | 4.97 |

# EUROPEAN UNIVERSITY OF LEFKE

## SYLLABUS

## 2025-2026 Fall Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| CTE 401 | Occupational Safety and Health | Elective | 3 | 0 | 0 | 3 | 5 | Monday 18.00 - 20.50 |
| Prerequisite | - | Prerequisite to | | | | - | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Hasan Dilek | Office Hours Schedule | Tuesday : 11:00 - 12:50 |
| E-mail | hdilek-lau@eul.edu.tr | | |
| Phone | - | Office / Room No | AS301 |
| Teaching Assistant(s) | - | Phone | - |
| E-mail | - | Office / Room No | - |

**Course Objectives**

The principal aim of this course is to provide the theory and history of occupational health and safety and globally including the enforcement of laws that address occupational safety and health. In addition, students will gain an understanding on the roles and responsibilities of workers, unions and employers. This course also reviews other safety related issues and aspects of recognizing, evaluating, and understanding control of safety and health hazards in the workplace.

**Learning outcomes**

The student will be able to attain the following learning outcomes for this course:

1. Gain an historical, economic, and organizational perspective of occupational safety and health
2. Demonstrate a base of knowledge in the recognition and assessment of health and safety hazards in the workplace
3. Identify the roles and functions of the occupational health and safety professional in the application
4. Describe basic components of an effective company safety and health program including management commitment, employee involvement, hazard recognition and control and training.

**Textbooks and/or References**

1. Friend, M.A. and Kohn, J.P. (2007) Fundamentals of Occupational Safety and Health. 4th ed., Government Institutes. The Scarecrow Press, USA.
2. Koradecka, D. (2010) Handbook of Occupational Safety and Health. Taylor and Francis Group. CRC Press, USA.
3. Reese, C.D. (2016) Occupational Health and Safety Management – A Practical Approach. 3rd ed. Taylor and Francis Group. CRC Press, USA.
4. Reese, C.D. (2017) Occupational Safety and Health – Fundamental Principles and Philosophies. Taylor and Francis Group. CRC Press, USA.

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 22/09/2025 | Introduction - History of Occupational Health and Safety | 1: 1, 1: 2; 3: 1, 4: A1, 4: A2 |
| Week 2 | 29/09/2025 | Safety Legislation | 1: 2; 2: 1; 3: 2; 4: B7 |
| Week 3 | 06/10/2025 | Compensation and Recordkeeping | 1: 3; 3: 19; 4: C15 |
| Week 4 | 13/10/2025 | Product Safety and Safety Related Business Laws | 1: 4; 4: C11; 4: J54 |
| Week 5 | 20/10/2025 | Accident Causes and Investigations | 1: 5; 3: 9; 4: B9, 4: F33 |
| Week 6 | 27/11/2025 | Personnel Involved in OCSH | 3: 3; 4: C14, 4: D |
| Week 7 | 03/11/2025 | Ergonomic Risk Factors | 2: 5.30; 3: 12; 4: J53 |
| Week 8 | 10/11/2025 | **Mid-term Exam** | |
| Week 9 | 08-16.11.2025 | Organizational Emergency Preparedness / External Force - Terrorism | 1: 13, 1: 14; 3: 21; 4: J49, 4: J50 |
| Week 10 | 01/12/2025 | Workplace Health and Safety - Physical Hazards | 1: 15; 2: 3.14; 2: 3.15, 3: 11, 3: 23 |
| Week 11 | 08/12/2025 | Workplace Health and Safety - Chemical Hazards | 1: 15; 2: 3.6; 3: 11 |
| Week 12 | 15/12/2025 | Workplace Health and Safety - Electrical Hazards | 1: 15; 2: 3.11, 2: 3.12; 3: 11 |
| Week 13 | 22/12/2025 | Workplace Health and Safety - Biological Hazards / Psychological Hazards | 1: 15; 2: 2; 3: 11 |
| Week 14 | 29/12/2025 | Workplace Health and Safety - Naturally Occurring Hazards, Controlling Hazards | 1: 15; 3: 11, 2: 5.26; 4: H |
| Week 15 | 03–11.01.2025 | **FINAL EXAM** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | | 50 | 50 |
| **Semester Evaluation** | | | | 50 |
| **Mid-term Exam** | 1 | | 50 | 50 |
| **Quiz(zes)** | | | | |
| **Project(s)** | 1 | | | |
| **Homework(s)** | | | | |
| **Laboratory** | | | | |
| **Other** | | | | |

*** *Lifelong Learning Programme (LLP)* *** Language of Instruction: **English**

| Evaluation Tool | Quantity | Student Workload Hours | Total | Evaluation Tool | Quantity | Student Workload Hours | Total |
|---|---|---|---|---|---|---|---|
| Theoretical | 14 | 3 | 42 | Applied Hours | | | |
| Midterm | 1 | 1 | 1 | Final | 1 | 1 | 1.0 |
| Quiz | | | | Group Project | | | |
| Laboratory | | | | Homework | | | |
| Atelier | | | | Seminar | | | |
| Field Study | | | | Presentation | | | |
| Other / Project | | | | Self Study | 13 | 7 | 91.0 |
| | | | | **TOTAL :** | | 135.0 | |
| | | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **5** | |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Arts and Sciences"

## "Molecular Biology and Genetics"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| GEN102/AGRI102 | Introduction to Molecular Biology and Genetics | Theory and Practice | 3 | 0 | 0 | 3 | 6 | Monday 09:00-12:00 |
| Prerequisite | | Prerequisite to | | | | | | |

| | | | |
|---|---|---|---|
| Course Lecturer | Asst Prof Dr Osman Dadaş | Office Hours Schedule | |
| E-mail | odadas@eul.edu.tr | | |
| Phone | | Office / Room No | ECZ020 |
| Teaching Assistant(s) | - | Phone | - |
| E-mail | | Office / Room No | |

| | |
|---|---|
| Course Objectives | The aim of the module is to make the students familiar with a various range of topics. The topics that will be covered throughout the module include; the structure and function of biomolecules, regulation of gene expression, genetic inheritance through generations, organisation of prokaryotic and eukaryotic cells, DNA replication, DNA damage and repair, chemical bonds in biology, cell cycle mechanisms, protein synthesis, biological membranes and transport mechanisms, and cancer development. Students will also learn |
| Learning Outcomes | To understand how the genome is structured. To understand how the structure of biomolecules dictates their functions. To become familiar with transcription, translation and protein sysnthesis mechanisms. To understand the process of DNA replication, mutation and repair. To become familiar with prokaryotic and eukaryotic cells and cellular organelles. To become familiar with the bonds making up biomolecules such as covalent and non-covalent interactions. To become familiar with principles and mechanisms of meiosis and mitosis. To understrand the structure and function of biological membranes and how molecules are transported across the membrane. |

| Text Books / References | | |
|---|---|---|
| | 1 | Molecular biology of the cell - 7th Edition |
| | 2 | Lecture Slides |
| | 3 | |
| | 4 | |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| Week 1 | 02.02.2026 | Introduction to the course | 2 |
| Week 2 | 09.02.2026 | Prokaryotic and eukaryotic cells | 1, 2 |
| Week 3 | 16.02.2026 | DNA replication | 1,2 |
| Week 4 | 23.02.2026 | DNA damage and repair mechanisms | 1,2 |
| Week 5 | 02.03.2026 | Bioenergetics | 1,2 |
| Week 6 | 09.03.2026 | Energy production and conversion | 1,2 |
| Week 7 | 16.03.2026 | Biological membranes and transport mechanisms | 1,2 |
| Week 8 | 23.03.2026 | Cell cycle mechanisms | 1,2 |
| Week 9 | 30.03.2026 | Cell Signalling | 1,2 |
| Week 10 | 04-12.04.2026 | Midterm Exam | |
| Week 11 | 13.04.2026 | Cancer Development | 1, 2 |
| Week 12 | 20.04.2026 | Cell Death Mechanisms | 1, 2 |
| Week 13 | 27.04.2026 | Molecular biology techniques | 1, 2 |
| Week 14 | 04.05.2026 | Quiz | |
| Week 15 | 11.05.2026 | Revision | |
| Week 16 | 16-25.05.2026 | Final Exam | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| Final Exam | 1 | | 50 | |
| Semester Evaluation | | | | |
| Midterm(s) | 1 | | 40 | |
| Quiz(zes) | 1 | | 10 | |
| Project(s) | | | | |
| Homework(s) | | | | |
| Participation | | | | |
| Presentations | | | | |

*** *Lifelong Learning Programme (LLP)* *** Language of Instruction: **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical | 14 | 42.0 | Applied Hours | | |
| Midterm | 1 | 1.0 | Final | 1 | 2.0 |
| Midterm Study | 1 | 10.0 | Final Study | 1 | 25.0 |
| Quiz | 1 | 10.0 | Project | | |
| Laboratory | | | Homework | | |
| Atelier | | | Seminar | 1 | 10.0 |
| Field Study | | | Presentation | | |
| Other | 1 | 10.0 | Self Study | 14 | 70.0 |
| | | | TOTAL : | | 180.0 |
| | | | Recommended ECTS Credit (Total Hours / 30) : | | 6 |

# LEFKE AVRUPA ÜNİVERSİTESİ

## ORTAK DERSLER

## DERS İZLEME PROGRAMI / 2025-2026 Bahar Yarıyılı

| Ders Kodu | Ders Adı | Ders Türü | Haftalık Ders Saati | | | Kredi | AKTS | Haftalık Gün ve Saati |
|---|---|---|---|---|---|---|---|---|
| | | | T | U | L | | | |
| ORTK106/TDIL101 | TÜRK DİLİ I / TÜRKÇE | Zorunlu | 2 | 0 | 0 | 2 | 5 | |
| Önkoşul Dersi | - | Önkoşullu Dersi | | | | - | | |

| | | | |
|---|---|---|---|
| Öğretim Üyesi | Doç. Dr. Elnur AĞAYEV | Öğrenci Görüşme Gün ve Saati | Salı 14:00-16:50 |
| E-posta | eagayev@eul.edu.tr | | |
| Telefon | 392 660 2000/ 2915 | Ofis / Oda No | Eğitim Fakültesi / AS225 |
| Öğretim Üyesi Yardımcıları | | Telefon | |
| E-posta | | Ofis / Oda No | |

| | |
|---|---|
| Dersin Amacı | Türk dilinin tarihi gelişimi ve temel gramer özellikleri, Yazılı ve sözlü anlatım türünün özellikleri; imlâ, noktalama ve vurgunun önemi; sözlü anlatım türleri ve örnekleri; yazıda plan, yapı ve paragraf; anlatım biçimleri, formal yazılar, yazılı anlatım türleri ve örneklerinin kavratılması |
| Dersin Hedefleri | Türk dilinin tarihi gelişimi, temel gramer özellikleri, yazılı ve sözlü anlatımda dikkat edilmesi gereken hususlar, kompozisyon ve formal yazı türlerinin kuralları ve uygulamaya geçirilmesi |
| Öğrenim Çıktıları | 1.Türkçenin temel fonetik ve yapısal özelliklerini kavrar.<br>2.Türkçenin telaffuz özelliklerini uygular.<br>3.Türkçenin temel kelime dağarcığını edinir.<br>4.Türkçe metin okuma becerilerini geliştirir.<br>5.Günlük yaşamda sıkça kullanılan Türkçe diyalogları kullanabilir. |

| Ders Kitabı ve/veya Kaynaklar | | |
|---|---|---|
| | 1 | TDIL101/ORTK106 Ders notları ve slaytlar |
| | 2 | Şerif Aktaş ve Osman Gündüz. Yazılı ve Sözlü Anlatım. Ankara: Akçağ Yayınları, 2011. |
| | 3 | Türkçe Sözlük. Ankara: Türk Dil Kurumu Yayınları, Ankara 2024. |
| | 4 | Yazım Kılavuzu. Ankara: Türk Dil Kurumu Yayınları, Ankara 2024. |
| | 5 | |

| HAFTA | Tarih | KONULAR | Öğrenme Çıktılarına Referans |
|---|---|---|---|
| 1. Hafta | 25/09/2025 | Dil nedir? Dilin Özellikleri, Dünya Dilleri ve Sınıflandırılması | 1,2,3,4 |
| 2. Hafta | 02/10/2025 | Türkçenin Dünya Dilleri Arasındaki Yeri; Türkçenin İlk Yazılı Belgeleri: Orhun Yazıtları | 1,2,3,4 |
| 3. Hafta | 09/10/2025 | Divanu Lugati't-Türk, Kutadgu Bilig, Dede Korkut Hikayeleri | 1,2,3,4 |
| 4. Hafta | 16/10/2025 | Türk Dilinin Tarihi Dönemleri; Lehçe, Şive ve Ağız Nedir? | 1,2,3,4 |
| 5. Hafta | 23/10/2025 | Türkçenin Sesleri ve Ses Özellikleri. Türkçe Sözcüklerin Ses Özellikleri; Ünlüler ve Ünsüzler | 1,2,3,4 |
| 6. Hafta | 30/10/2025 | Yapım Ekleri ve Sınıflandırılması; Çekim Ekleri ve Sınıflandırılması | 1,2,3,4 |
| 7. Hafta | 06/11/2025 | İsim ve Sıfatlar. Genel Özellkler ve Örnekler | 1,2,3,4 |
| 8. Hafta | 13/11/2025 | **Vize Sınavı** | |
| 9. Hafta | 20/11/2025 | Zamirler ve Zarflar. Genel Özellikler ve Örnekler | 1,2,3,4 |
| 10. Hafta | 27/11/2025 | İsim Tamlaması, Sıfat Tamlaması; Cümle nedir? Cümlenin Öğeleri, Cümle Tahlilleri | 1,2,3,4 |
| 11. Hafta | 04/12/2025 | Kompozisyon Nedir? Kompozisyon Yazım Kuralları Nelerdir? | 1,2,3,4 |
| 12. Hafta | 11/12/2025 | Formal Yazılar: Dilekçe Nasıl Yazılır? Noktalama İşaretleri ve Kullanımı | 1,2,3,4 |
| 13. Hafta | 18/12/2025 | Yazılı Anlatım Türleri ve Özellikleri; Konuşma Sorunları ve Giderilmesi; Sözlü Anlatım Türleri, Türkçede Söyleyiş Yanlışları ve Vurgu | 1,2,3,4 |
| 14. Hafta | 25/12/2025 | Ses Açma Çalışmaları ve Konuşma Egzersizleri; Konuşma Metni Hazırlanması ve Konuşmacının Dikkat Etmesi | 1,2,3,4 |
| 15. hafta | | **Final Sınavı** | |

| Değerlendirme Araçları<br>1. Vize Sınavı 40%<br>2. Final Sınavı 60% | Ölçme Aracı | Adet | Tarih | Başarı Notuna Katkısı (%) | Yarıyıl İçi Değerlendirme Notuna Katkısı (%) |
|---|---|---|---|---|---|
| | Final Sınavı | 1 | 3 January 2026 | 60 | 0 |
| | Yarıyıl İçi Değerlendirmesi | | | | 100 |
| | Vize Sınavı | 1 | 13 November 2025 | 40 | 40 |

*** Hayatboyu Öğrenme Programı (LLP) *** | Öğretim Dili: Türkçe

| Değerl. Aracı | Adet | Öğrenci İşyükü Saati | Değerl. Aracı | Adet | Öğrenci İşyükü Saati |
|---|---|---|---|---|---|
| Teorik Saati | 14 | 28.0 | Uygulama Saati | | |
| Ara sınav | 1 | 1.0 | Final Sınavı | 1 | 1.0 |
| Kısa Sınav | | | Proje | | |
| Laboratuvar | | | Ödev | | |
| Atölye | | | Seminer | | |
| Alan Çalışması | | | Sunum | | |
| AS Bireysel Çalışma | 7 | 28.0 | FS Bireysel Çalışma | 14 | 56.0 |
| | | | **TOPLAM :** | | 114.0 |
| | | | **Tavsiye Edilen AKTS Kredisi (Toplam Saat / 25) :** | | **5** |

# LEFKE AVRUPA ÜNİVERSİTESİ / ORTAK DERSLER

## DERS İZLEME PROGRAMI

| Ders Kodu | Ders Adı | Ders Türü | Haftalık Ders Saati | | | Kredi | ECTS | Haftalık Gün ve Saati |
|---|---|---|---|---|---|---|---|---|
| | | | T | U | L | | | |
| ORTK108 | Atatürk İlkeleri ve İnkılâp Tarihi | Zorunlu | 2 | | | 2 | | |

| | | | |
|---|---|---|---|
| **Öğretim Üyesi** | Doç. Dr. Elnur AĞAYEV | **Öğrenci Görüşme Gün ve Saati** | |
| **E-posta** | eagayev@eul.edu.tr | | |
| **Telefon** | 392 660 2000/ 2915 | **Ofis / Oda No** | Eğitim Fakültesi: AS 225 |
| **Öğretim Üyesi Yardımcıları** | | **Telefon** | |

| | |
|---|---|
| **Dersin Amacı** | Bu derste; öğrencilere tarih bilinci verilecek, var olan tarih bilinçleri pekiştirilecek ve "1923 Devrimi"nin felsefi ve düşünsel temelleri kazandırılmaya çalışılacaktır. Laik-demokratik Cumhuriyetin oturduğu dinamikler, devrimler ve devrimlerin Türk toplumu açısından taşıdığı önem, Büyük Asker ve Devlet Adamı Atatürk'ün hayat hikâyesinin yanı sıra, Türk Ulusu'nun Atatürk önderliğinde bağımsızlığını savunuşu, onun çok yönlü kişiliği ve liderlik özellikleri irdelenecektir. Ayrıca, genç ve dinamik Türkiye Cumhuriyeti'nin kuruluşu ve bu Cumhuriyet'in hızla yükselişi ve devrimlerin önemi vurgulanacaktır. Dönem sonunda Milli Mücadele sürecinin ve Türkiye Cumhuriyeti tarihinin öğrenciler tarafından derinlikli olarak anlaşılması hedeflenmektedir. |
| **Öğrenim Çıktıları** | 1. I. Dünya Savaşı sonrası gelişmeleri ve bu gelişmeler karşısında Mustafa Kemal ve arkadaşlarının tutumlarını analiz eder. 2. Atatürk Dönemi Türk Dış Politikasını Anlamak 3. II. Dünya Savaşı sırasında ve sonrasında Türkiye ve dünyadaki siyasi gelişmeler hakkında temel bilgilere sahip olacaklardır. 4. Kıbrıs Tarihi hakkında genel bilgi sahibi olmak |
| **Ders Kitabı ve/veya Kaynaklar** | *Atatürk ve Türk İnkılâp Tarihi,* editör Fatma ACUN, Siyasal kitabevi, Ankara 2009 |
| | *Başlangıcından Günümüze Türkiye Cumhuriyeti Tarihi,* editör Temuçin Faik Ertan, Siyasal kitabevi, Ankara 2011. |
| | Bayram Bayraktar, *Atatürk İlkeleri ve Türk İnkılâp Tarihi* , Detay yayıncılık, Ankara 2009. |
| | *Türk İnkılâp Tarihi ve Atatürk İlkeleri* , editör E. Semih Yalçın, Berikan yayınevi, Ankara 2010. |

| HAFTA | TARİH | KONULAR | 1.1 Kaynak No - İlgili Bölüm |
|---|---|---|---|
| 1. Hafta | | Temel Kavramlar (İnkılâp, İhtilal, Islahat, Darbe, Monarşi, Meşrutiyet, Oligarşi, Demokrasi, Cumhuriyet...), Osmanlı Devleti'nin Gerileme Sebepleri, I. Dünya Savaşı ve Osmanlının Çöküş Süreci | |
| 2. Hafta | | Monrodos Mütarekesi, İlk İşgaller / Milli Mücadele Öncesi Anadolu'da Genel Görünüm /Yararlı ve Zararlı Cemiyetler | |
| 3. Hafta | | Mustafa Kemal Paşanın 9. Ordu Müfettişliği Görevine Atanma Süreci / Havza ve Amasya Genelgeleri / Kongreler Dönemi / Amasya Mülakatı / Son Osmanlı Mebusan Meclisi ve Misak-ı Milli | |
| 4. Hafta | | TBMM'nin açılması ve İlk Faaliyeteleri / Siyasi ve Askeri Mücadeleler Dönemi / I. Londra Konferansı / San Remo Konferansı / Sevr Antlaşması | |
| 5. Hafta | | Milli Mücadele Dönemi ve Bağımsızlık Savaşının İnsan, Silah ve Mali Kaynakları / Batı Cephesi Savaşları (I. İnönü-II. İnönü-Eskişehir-Kütahya Savaşı) | |
| 6. Hafta | | Baş Komutanlık ve Tekâlif-i Milliye / Sakarya Meydan Savaşı ve Büyük Taarruz | |
| 7. Hafta | | Mudanya Mütarekesi / Lozan Barış Antlaşması | |
| 8. Hafta | | **ARA SINAVI** | |
| 9. Hafta | | Atatürk Dönemi İç Politika / Saltanatın Kaldırılması / Cumhuriyetin İlanı / Halifeliğin İlgası / | |
| 10. Hafta | | Anayasal Hareketeler / Teşkilat-ı Esasiye Kanunu / 1924 Anayasası | |
| 11. Hafta | | Çok Partili Hayata Geçiş Denemeleri / Şeyh Sait İsyanı / İzmir Suikastı / Menemen Olayı | |
| 12. Hafta | | Hukuk Alanındaki İnkılâplar / Eğitim ve Kültür Alanındaki İnkılâplar / Sosyal Alanda Yapılan İnkılâplar | |
| 13. Hafta | | Atatürk Dönemi Dış Politika / Saadabat Paktı / Balkan Antantı / Musul Meselesi ve Hatay'ın Anavatana Katılması | |
| 14. Hafta | | Atatürk İlkeleri (Cumhuriyetçilik / Milliyetçilik / Halkçılık/Devletçilik / Laiklik / Devrimcilik) | |

| Değerlendirme Araçları | Ölçme Aracı | Adet | Tarih | Başarı Notuna Katkısı (%) | |
|---|---|---|---|---|---|
| | Yarıyıl Sonu Sınavı | | | 60 | |
| | Yarıyıl İçi Değerlendirmesi | | | | Yarıyıl İçi Değerlendirme Notuna Katkısı (%) |
| | Ara Sınav(lar) | | | 40 | |
| | Kısa Sınav(lar) | | | | |
| | Proje(ler) | | | | |
| | Ödev(ler) | | | | |
| | Laboratuvar | | | | |
| | Diğer | | | | |

*** *Hayatboyu Öğrenme Programı (LLP)* *** Öğretim Dili:

| Değerl. Aracı | Adet | Öğrenci İşyükü Saati | | Değerl. Aracı | Adet | |
|---|---|---|---|---|---|---|
| Teorik Saati | | | | Uygulama Saati | | |
| Ara sınav | | | | Yarıyıl Sonu Sınavı | | Öğrenci İşyükü Saati |
| Kısa Sınav | | | | Proje | | |
| Laboratuvar | | | | Ödev | | |
| Atölye | | | | Seminer | | |
| Alan Çalışması | | | | Sunum | | |
| Diğer | | | | Bireysel Çalışma | | |
| | | | | **TOPLAM :** | | |

| Birim Adı | but | kisa ad | Tip | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Zorunlu | |

# EUROPEAN UNIVERSITY OF LEFKE- "Faculty of Agricultural Sciences and Technologies"

## "Department of Horticulture"

## SYLLABUS

## 2025-2026 Spring Semester

| Course Code | Course Name | Course Type | Weekly Course Hours T | A | L | Credits | ECTS | Weekly Time Schedule |
|---|---|---|---|---|---|---|---|---|
| AGRI 152 | Botany | Compulsory | 2 | 2 | 0 | 3 | 8 | Wednesday 12:00-14:00 |

| | | | | | |
|---|---|---|---|---|---|
| **Prerequisite:** | n/a | **Prerequisite to:** | n/a | | |
| **Semester:** | 2nd Semester | **Frequency:** | each spring term | **Planned class size:** | 30 students |
| **Teaching methods:** | Lectures, field practices, assignment and discussions | | | **Duration:** | 1 semester |

| | | | |
|---|---|---|---|
| **Course Lecturer:** | Assist. Prof. Dr. Murat Helvacı | **Office Hours** | Monday 14:00-17:00, Tuesday 09:00-12:00, Wednesday |
| **E-mail** | mhelvaci@eul.edu.tr | **Schedule:** | 09:00-11:00;15:00-17:00, Friday 09:00-12:00;14:00-17:00 |
| **Phone** | 0 542 850 0336 | **Office/Room No:** | AS 240 |
| **Teaching Assistant:** | | **Phone:** | |
| **E-mail:** | | **Office/Room No:** | |

| | |
|---|---|
| **Course Objectives:** | To give the informations about plant cell, vascular system of plants, photosynthesis, growth and development of plants, plant growth regulators, respiration, primitive plants, monocot and dicot plants, morphological characteristics of plants, important plant families, their classifications and ecologies. |
| **Learning Outcomes:** | Learning outcomes of the lecture can be summerized as below:<br>1- Define botany and identify characteristics common to all plants<br>2- Describe the complexity of plant cell structure and function<br>3- Compare and contrast the structure and function of different groups of plants<br>4- Describe various systems of classification and basic properties of organisms found in each Kingdom and classify common plants based on the binomial system of nomenclature<br>5- Identify and describe the process and individual reactions of photosynthesis and respiration<br>6- Describe the basic principles of plant production |

| **Programme Outcome Relations** | | | |
|---|---|---|---|
| **PO1: 3**<br>**PO2: 1**<br>**PO3: 3**<br>**PO4: 2**<br>**PO5: 5**<br>**PO6: 1** | **PO7: 4**<br>**PO8: 2**<br>**PO9: 1**<br>**PO10: 1** | **(1) Strongly disagree;**<br>**(2) Disagree;**<br>**(3) Neither agree nor disagree;**<br>**(4) Agree;**<br>**(5) Strongly agree.** | |

| **Textbooks and/or References:** | | |
|---|---|---|
| | 1 | Byng, J. W. (2014). The Flowering Plants Handbook: A practical guide to families and genera of the world. Plant Gateway Ltd.. |
| | 2 | Jose, S. and Clennett C. (2019). Trees, Leaves, Flowers and Seeds (1st Edition). Darling Kindersley Publishing, 192p. |
| | 3 | Bahadur, B., Rajam, M. V., Sahijram, L., & Krishnamurthy, K. V. (Eds.). (2015). Plant biology and biotechnology: Volume I: Plant diversity, organization, function and improvement (No. 11603). Springer India. |

| WEEK | Date | TOPICS | Reference No - Section |
|---|---|---|---|
| **Week 1** | 04.02.2026 | Plant Structures | 3, 195 |
| **Week 2** | 11.02.2026 | The Plant Cell and Its Molecular Components | 3, 50 |
| **Week 3** | 18.02.2026 | Photosynthesis and Respiration | 3, 262/3, 295 |
| **Week 4** | 25.02.2026 | Flowers | 2, 64 |
| **Week 5** | 04.03.2026 | Reproduction in Flowering Plants | 2, 68 |
| **Week 6** | 11.03.2026 | Angiosperms and Gymnosperms | 2, 10 |
| **Week 7** | 18.03.2026 | Differences between botany of fruit and vegetables | 2, 134 |
| **Week 8** | 25.03.2026 | C3, C4 and CAM Plants | 2,12 |
| **Week 9** | 01.04.2026 | Leaf Anatomy and Morphology | 1,23 |
| **Week 10** | ***04-12 April 2026*** | ***Midterm(s)*** | |
| **Week 11** | 15.04.2026 | Meiosis and Fertilization | 2,68 |
| **Week 12** | 22.04.2026 | Root Anatomy | 1, 12 |
| **Week 13** | 29.04.2026 | Plant Taxonomy | 2, 10 |
| **Week 14** | 06.05.2026 | Seedless Plants | 2, 12 |
| **Week 13** | 13.05.2026 | Plant Tissues | 1, 8 |
| **Week 15** | ***16-25 May 2026*** | ***Final Exam*** | |

**Evaluation Tools**

| Evaluation Tool | Quantity | Date | Weight in Total (%) | Weight in Semester Evaluation (%) |
|---|---|---|---|---|
| **Final Exam** | 1 | 16-25 May 2026 | 50 | 100 |
| **Semester Evaluation** | | | 50 | |
| **Midterm(s)** | 1 | 04-12 April 2026 | 40 | 80 |
| **Quiz(zes)** | | | | |
| **Project(s)** | | | | |
| **Homework(s)** | 1 | | 10 | 20 |
| **Laboratory** | | | | |
| **Attendance** | | | | |

*** ***Lifelong Learning Programme (LLP)*** ***

**Language of Instruction:** **English**

| Evaluation Tool | Quantity | Student Workload Hours | Evaluation Tool | Quantity | Student Workload Hours |
|---|---|---|---|---|---|
| Theoretical lecture hours (TLH) | 14 | 28 | Homework | 1 | 6 |
| TLH Self Study | 14 | 84 | Mid-term Exam (ME) | 1 | 2 |
| Quz (Q) | 0 | 0 | ME preparation self study | 1 | 8 |
| Q preparation self study | 0 | 0 | Seminar | 0 | 0 |
| Laboratory (L) | 0 | 0 | Presentation | 0 | 0 |
| L preparation self study | 0 | 0 | Project | 0 | 0 |
| Applied Hours (AH) | 14 | 28 | Final Exam (FE) | 1 | 2 |
| AH preparation self study | 14 | 72 | FE preparation self study | 1 | 10 |
| | | | **TOTAL :** | | **240** |
| | | | **Recommended ECTS Credit (Total Hours / 30) :** | | **8.00** |