

## COURSE OUTLINE

### 1. GENERAL

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| SCHOOL                                                                                                                                                                                                                                                         | SCHOOL OF PLANT SCIENCES                                                              |          |                 |
| ACADEMIC UNIT                                                                                                                                                                                                                                                  | CROP SCIENCE                                                                          |          |                 |
| LEVEL OF STUDIES                                                                                                                                                                                                                                               | Undergraduate                                                                         |          |                 |
| COURSE CODE                                                                                                                                                                                                                                                    | 3555                                                                                  | SEMESTER | 4 <sup>th</sup> |
| COURSE TITLE                                                                                                                                                                                                                                                   | Postharvest Diseases of Fruits and Vegetables                                         |          |                 |
| INDEPENDENT TEACHING ACTIVITIES<br><i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i> | WEEKLY TEACHING HOURS                                                                 | CREDITS  |                 |
| Lectures                                                                                                                                                                                                                                                       | 3                                                                                     | 3        |                 |
| Laboratory Exercises                                                                                                                                                                                                                                           | 2                                                                                     | 2        |                 |
| Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).                                                                                                                                              |                                                                                       |          |                 |
| COURSE TYPE<br><i>general background, special background, specialised general knowledge, skills development</i>                                                                                                                                                | Scientific expertise                                                                  |          |                 |
| PREREQUISITE COURSES:                                                                                                                                                                                                                                          | NONE                                                                                  |          |                 |
| LANGUAGE OF INSTRUCTION and EXAMINATIONS:                                                                                                                                                                                                                      | Greek                                                                                 |          |                 |
| IS THE COURSE OFFERED TO ERASMUS STUDENTS                                                                                                                                                                                                                      | NO                                                                                    |          |                 |
| COURSE WEBSITE (URL)                                                                                                                                                                                                                                           | <a href="https://w1.aua.gr/efp/en/courses-2/">https://w1.aua.gr/efp/en/courses-2/</a> |          |                 |

### 2. LEARNING OUTCOMES

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| <p><b>Learning outcomes</b></p> <p>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</p> <p>Consult Appendix A</p> <ul style="list-style-type: none"> <li>• Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</li> <li>• Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</li> <li>• Guidelines for writing Learning Outcomes</li> </ul> |
| <p>On completion of this course, students should be able to:</p> <ul style="list-style-type: none"> <li>• Identify disease symptoms</li> <li>• Recognize major plant pathogens on plant tissues and/or under light microscope</li> <li>• Describe the ecology, spread, symptoms and control of plant pathogens</li> <li>• Explain the transmission, detection, identification and control of plant viruses</li> <li>• Outline the events of plant – pathogen interactions</li> <li>• Describe the factors that influence the disease outcome</li> </ul>                                                                                                          |
| <b>General Competences</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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| Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim? |                                                                                          |
| Search for, analysis and synthesis of data and information, with the use of the necessary technology                                                                                               | Project planning and management                                                          |
| Adapting to new situations                                                                                                                                                                         | Respect for difference and multiculturalism                                              |
| Decision-making                                                                                                                                                                                    | Respect for the natural environment                                                      |
| Working independently                                                                                                                                                                              | Showing social, professional and ethical responsibility and sensitivity to gender issues |
| Teamwork                                                                                                                                                                                           | Criticism and self-criticism                                                             |
| Working in an international environment                                                                                                                                                            | Production of free, creative and inductive thinking                                      |
| Working in an interdisciplinary environment                                                                                                                                                        | ... ..                                                                                   |
| Production of new research ideas                                                                                                                                                                   | Others...                                                                                |
| Individual/Independent work                                                                                                                                                                        |                                                                                          |
| Critical thinking                                                                                                                                                                                  |                                                                                          |
| Development of free, creative and inductive thinking                                                                                                                                               |                                                                                          |

### 3. SYLLABUS

|                                                                                                                                                                     |
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| Concept of disease                                                                                                                                                  |
| Symptoms and signs of postharvest diseases                                                                                                                          |
| Major plant pathogenic causes and epidemiology of postharvest diseases [fungi oomycetes, bacteria, viruses]                                                         |
| Non-parasitic causes (adverse temperature, humidity, and nutritional conditions; environmental toxic factors; transportation, storage, and distribution conditions) |
| Major postharvest diseases of fruits and vegetables                                                                                                                 |
| Diagnosis of postharvest diseases                                                                                                                                   |
| Management of postharvest diseases (pre-harvest and postharvest)                                                                                                    |

#### 1. TEACHING and LEARNING METHODS - EVALUATION

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                       |                          |
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| <b>DELIVERY</b><br><i>Face-to-face, Distance learning, etc.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                               | Face to Face                                          |                          |
| <b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b><br><i>Use of ICT in teaching, laboratory education, communication with students</i>                                                                                                                                                                                                                                                                                                                                                                   | Use of ICT in teaching<br>Communication with students |                          |
| <b>TEACHING METHODS</b><br><i>The manner and methods of teaching are described in detail.<br/>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i><br><br><i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i> | <b>Activity</b>                                       | <b>Semester workload</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Lectures                                              | 39                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Personal study                                        | 66                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Course total                                          | <b>125</b>               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                       |                          |
| <b>STUDENT PERFORMANCE EVALUATION</b><br><i>Description of the evaluation procedure</i><br><br><i>Language of evaluation, methods of evaluation, summative or conclusive, multiple-choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination,</i>                                                                                                                                                                                    | Written Exam at the end of the semester               |                          |

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| public presentation, laboratory work, clinical examination of patient, art interpretation, other |  |
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| Specifically defined evaluation criteria are given, and if and where they are accessible to students. |  |
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## **2. ATTACHED BIBLIOGRAPHY**

- Suggested bibliography:

Post-Harvest Diseases and Disorders of Fruits and Vegetables

By Anna L. Snowden

DOI <https://doi.org/10.1201/b18215>

- Related academic journals:

Postharvest Biology and Technology

<https://www.sciencedirect.com/journal/postharvest-biology-and-technology>