



UNIVERSITÀ DEGLI STUDI DI PALERMO

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| DEPARTMENT | Scienze Agrarie, Alimentari e Forestali | | |
| ACADEMIC YEAR | 2022/2023 | | |
| MASTER'S DEGREE (MSC) | AGRICULTURAL PRODUCTIONS AND TECHNOLOGIES | | |
| SUBJECT | FRUIT FARMING | | |
| TYPE OF EDUCATIONAL ACTIVITY | B | | |
| AMBIT | 50544-Discipline della produzione | | |
| CODE | 19948 | | |
| SCIENTIFIC SECTOR(S) | AGR/03 | | |
| HEAD PROFESSOR(S) | INGLESE PAOLO | Professore Ordinario | Univ. di PALERMO |
| OTHER PROFESSOR(S) | | | |
| CREDITS | 6 | | |
| INDIVIDUAL STUDY (Hrs) | 90 | | |
| COURSE ACTIVITY (Hrs) | 60 | | |
| PROPAEDEUTICAL SUBJECTS | | | |
| MUTUALIZATION | | | |
| YEAR | 1 | | |
| TERM (SEMESTER) | 2° semester | | |
| ATTENDANCE | Not mandatory | | |
| EVALUATION | Out of 30 | | |
| TEACHER OFFICE HOURS | INGLESE PAOLO Wednesday 08:00 10:00 Viale delle Scienze, Ed. 4 Dipartimento di Scienze Agrarie e Forestali Friday 08:00 10:00 Viale delle Scienze, Ed. 4 Dipartimento di Scienze Agrarie e Forestali | | |

DOCENTE: Prof. PAOLO INGLESE

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| PREREQUISITES | In order to understand the contents and learning objectives of the course, students must have basic knowledge of general horticulture |
| LEARNING OUTCOMES | <p>Knowledge and understanding The course aims at transferring to the students the scientific and technical knowledge necessary to know the specificities of the fruit growing sector. Students will acquire the necessary knowledge to understand the possible responses of the orchard system to variations in environmental factors (eco-physiological aspects) and cultural factors (management aspects). In particular, students will have the opportunity to understand the physiological processes that allow the varieties to tolerate / overcome / recover abiotic stress conditions (water, thermal and light stress) and the criteria for deciding whether and how to intervene to favor / interfere with some fundamental biological processes for fruiting purposes. Ability to apply knowledge and understanding The course transmits the knowledge and skills necessary to set up and manage complex fruit systems, in relation to the different production objectives and to the different types of plant. It also allows us to understand with a holistic approach the relationships between climate, biotic stress, crop interventions, productivity and quality of production and represents the fundamental prerequisite for successfully applying the knowledge acquired to the world of production. Autonomy of judgment Being able to harmonize all the factors of production (environment, cultivar, crop management) and suggesting innovative technical solutions to favor the best outcome of the production activity. Communication skills The student, once acquired the specific technical vocabulary and being in possession of the fundamental knowledge relating to the processes of vegetative and reproductive biology and agronomic needs, will be able to advise and direct entrepreneurs in the most appropriate technical choices for purposes of the economic success of the crop. Learning ability It takes the form of acquiring the ability to relate the various factors that contribute to determining the productive result in the fruit growing sector, adapting the choices to the changing socio-economic conditions of the market, of destination of the product, keeping account of the most recent technical innovations that can contribute to the achievement of production objectives.</p> |
| ASSESSMENT METHODS | The assessment of learning will be carried out with an oral test. The candidate will have to answer at least two / three questions posed orally, on all the parts of the program, with reference to the topics covered in the lessons in the exercises, in the recommended texts and in the teaching material provided by the teacher. The final test aims to assess whether the student has knowledge and understanding of the topics, has acquired interpretative competence and autonomy of judgment of concrete cases. The sufficiency threshold (18/30) will be reached when the student shows knowledge and understanding of the topics at least in general lines and has minimal application skills such as to be able to talk about fruit growing and partial approach for solving concrete cases; he must also possess expository and argumentative skills such as to allow the transmission of his knowledge to the examiner. Below this threshold, the examination will be insufficient. The more, however, the examiner with his argumentative and expository skills manages to interact with the examiner, and the more his knowledge and application skills go into the detail of the discipline being tested, the more the evaluation will be 'positive. The evaluation takes place out of thirty |
| EDUCATIONAL OBJECTIVES | The course aims to provide the fundamental knowledge to establish and manage fruit systems in geographical areas characterized by a temperate climate, both in open field conditions and in a protected environment. Particular emphasis will be given to the ecophysiological aspects and to the relative response in systems with different degrees of cultivation intensification. The student will then be instructed to use the information, to develop agronomic strategies and techniques, to enhance the productivity and qualitative characteristics of fruits in sustainable systems based on deciduous fruit species (stone fruit; pome fruit and dried fruit). |
| TEACHING METHODS | Lectures and technical visits to experimental fields and nursery structures |
| SUGGESTED BIBLIOGRAPHY | Arboricoltura Speciale - Edagricole Alessandra Gentile, Paolo Inglese e Massimo Tagliavini eds. Lezioni frontali e visite tecniche presso campi sperimentali e strutture vivaistiche |

SYLLABUS

| Hrs | Frontal teaching |
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| 2 | The course: content and targets |
| 8 | The Italian Horticulture and its history, role and significance. Perspectives and evolution from intensive growing to resilience |
| 10 | Orchard planting: how to select a site and the crop; planting systems and techniques. Distances and orchard design. Planting material |
| 8 | Peach: orchard planting and management; genetic resources and post harvest management |

SYLLABUS

| Hrs | Frontal teaching |
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| 4 | Kiwifruit: orchard planting and management; genetic resources and post harvest management |
| 6 | Cactus pear: orchard planting and management; genetic resources and post harvest management |
| 4 | Mango and Avocado: orchard planting and management; genetic resources and post harvest management |
| 2 | Apricot: orchard planting and management; genetic resources and post harvest management |
| 4 | Almond and Pistachio: orchard planting and management; genetic resources and post harvest management |
| Hrs | Workshops |
| 6 | Commercial harvest maturity check |
| Hrs | Others |
| 6 | Orchard visit and discussion |