



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Scienze Agrarie, Alimentari e Forestali
<b>ACADEMIC YEAR</b>	2022/2023
<b>BACHELOR'S DEGREE (BSC)</b>	AGRICULTURAL SCIENCES AND TECHNOLOGIES
<b>SUBJECT</b>	HORTICULTURE AND FLORICULTURE
<b>TYPE OF EDUCATIONAL ACTIVITY</b>	C
<b>AMBIT</b>	10689-Attività formative affini o integrative
<b>CODE</b>	05457
<b>SCIENTIFIC SECTOR(S)</b>	AGR/04
<b>HEAD PROFESSOR(S)</b>	VETRANO FILIPPO      Professore Associato      Univ. di PALERMO
<b>OTHER PROFESSOR(S)</b>	
<b>CREDITS</b>	7
<b>INDIVIDUAL STUDY (Hrs)</b>	115
<b>COURSE ACTIVITY (Hrs)</b>	60
<b>PROPAEDEUTICAL SUBJECTS</b>	
<b>MUTUALIZATION</b>	
<b>YEAR</b>	3
<b>TERM (SEMESTER)</b>	2° semester
<b>ATTENDANCE</b>	Not mandatory
<b>EVALUATION</b>	Out of 30
<b>TEACHER OFFICE HOURS</b>	<b>VETRANO FILIPPO</b> Tuesday 9:00 11:00 Studio del docente stanza 129 ed. 5 P1 Wednesday 9:00 11:00 Palazzo Principe di Napoli, Via Cappuccini, Trapani - Previo appuntamento Thursday 12:00 14:00 Via Real Maetranza, Aula 8 -Polo di Caltanissetta

DOCENTE: Prof. FILIPPO VETRANO

<b>PREREQUISITES</b>	Plant biology
<b>LEARNING OUTCOMES</b>	<p>Knowledge and understanding: at the end of the course, students will have basic knowledge about systems and processes of production of vegetables and cut flowers.</p> <p>Capacity to apply knowledge and comprehension: the acquired knowledge will allow to manage and develop appropriate cultivation techniques for production of leafy greens, fruiting, bulbous and tuberous vegetables.</p> <p>Autonomy of judgment and decision with respect to various environmental conditions and different contexts in the application of modern cultivation techniques in the vegetable and floriculture sectors. Acquire communicative skills in order to advise growers involved in the vegetable and floriculture industry to design and develop production schedules related to the market demand.</p> <p>Comprehension capacity to modify and improve cultivation techniques to address new market trends both through acquired skills and continuous scientific updating and professional meeting attending.</p>
<b>ASSESSMENT METHODS</b>	<p>The oral exam is finalised to verify the disciplinary skills and knowledge included in the syllabus; the assessment is expressed into thirty out of thirty. The minimum number of questions is three and aims to verify the gained knowledge, the elaboration abilities, as well as the possess of an adequate speaking ability. The threshold for sufficiency (18/30) will be gained when the student shows knowledge and understanding of topics, at least in their guidelines, and has minimum levels of applied skills concerning the solution of specific case studies; he should be in possess of talking abilities and of a correct use of language for the specificity of the course. Below this threshold the exam will be assessed as insufficient. The more the student shows argumentative and talking capacities, besides knowledge going into details of the discipline, the more his assessment will be positive till the grade of excellence (30/30 cum laude).</p>
<b>EDUCATIONAL OBJECTIVES</b>	<p>Provide students specific knowledge concerning planting, growth and plant management of the main vegetable crops and cut flowers.</p> <p>The subject matter will allow to acquire knowledge on morphological, physiological and ecological characteristics of the main cultivated vegetable species. Furthermore, the course will allow to acquire knowledge on crop rotations, variety choice, planting, irrigation, fertilization, harvest and post-harvest in relation to the soil and climatic environment and to the market demands.</p>
<b>TEACHING METHODS</b>	Oral lectures; Practical training; excursions to Sicilian vegetable and floriculture farms.
<b>SUGGESTED BIBLIOGRAPHY</b>	<p>Accati, Garibaldi – Trattato di Floricoltura. Edagricole. ISBN: 8820631350</p> <p>Tesi R. – Principi di orticoltura e ortaggi d'Italia. Edagricole. ISBN: 8820639610</p> <p>Bianco VV. e Pimpini F – Orticoltura. Patron Editore. ISBN: 8855520997</p> <p>Pardossi et al., 2018 - Orticoltura: principi e pratica. Edagricole. ISBN: 9788850655144</p>

## SYLLABUS

Hrs	Frontal teaching
2	Introduction to the course: contents, training objectives, examination modality
6	Protected cultivation system for semi-forced and forced crops (mulching, tunnels, greenhouses, covering materials, cooling and heating systems)
4	Substrates and containers. The soilless systems
4	Propagation for vegetable and floriculture plants: by seed, by division - separation - layering, by cutting of stem - leaf -root, by grafting. Propagation of geophytes
2	Soil disinfestation: chemical, physical and biological methods
11	Diffusion, economic relevance, botanical classification, morphophysiological characteristics, techniques and cycles of cultivation of the following horticultural species: tomato, artichoke, melon, potato, aubergine.
11	Diffusion, economic relevance, botanical classification, morphophysiological characteristics, techniques and cycles of cultivation of the following cut flower species: rose, carnation, chrysanthemum, gerbera.
Hrs	Practice
10	Practical training on: substrates, containers, greenhouses, covering materials, heating and cooling systems; soilless cultivation on grodan, floating system and NFT; grafting for cucurbitaceae and solanaceae; grafting for rose and standing plant, bending of rose; propagation of iris, liliium, amaryllis; artichoke propagation by rooted shoots; pinching and disbudding of chrysanthemum, carnation, rose and gerbera; potato seeds and sprouting techniques.
Hrs	Others
10	Technical excursion to vegetable and cut flower sicilian farms