



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Scienze Agrarie, Alimentari e Forestali		
<b>ACADEMIC YEAR</b>	2023/2024		
<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>	MONCADA ALESSANDRA	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>MONCADA ALESSANDRA</b> Tuesday 10:00 13:00 Dip. SAAF - Stanza docente n. 127 Ed. 5 - B. P1 - 31 (appuntamento via mail) Wednesday 10:00 13:00 Dip. SAAF - Stanza docente n. 127 Ed. 5 - B. P1 - 31 (appuntamento via mail) Thursday 10:00 13:00 Dip. SAAF - Stanza docente n. 127 Ed. 5 - B. P1 - 31 (appuntamento via mail)		

**DOCENTE:** Prof.ssa ALESSANDRA MONCADA

<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 examination consists of an interview (30 minutes); the final evaluation is expressed in thirtieths (minimum grade is 18 and maximum is 30 cum laude) following scheme:</p> <p>1) Knowledge of the topics, capability to apply the learned knowledge, capability to analyze the studied problem, ability to present the topic is judged sufficient (18-21)</p> <p>2) Knowledge of the topics, capability to apply the learned knowledge, capability to analyze the studied problem, ability to present the topic is judged fair (22-25)</p> <p>3) Knowledge of the topics, capability to apply the learned knowledge, capability to analyze the studied problem, ability to present the topic is judged good-high (26-28)</p> <p>4) Knowledge of the topics, capability to apply the learned knowledge, capability to analyze the studied problem, ability to present the topic is judged highadvanced (29-30 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>Pardossi et al., 2018 - Orticoltura: principi e pratica. Edagricole. ISBN: 9788850655144</p> <p>Incrocci et al., 2022 - Colture fuori suolo. Idroponica e coltivazione in substrato. Edagricole. ISBN: 9788850655724</p> <p>Scariot V. et al., 2022 - Florovivaismo. Principi e tecniche. Edagricole. ISBN: 9788850655175</p> <p>Angelini R. et al. 2009 - Il carciofo e il cardo. Ed. Script Collana Coltura &amp; cultura. ISBN-10: 889630105X - ISBN-13: 9788896301050 (formato e-book)</p> <p>Autori Vari, 2010 - Il pomodoro. Ed. Script Collana Coltura &amp; cultura. ISBN-10: 8896301068 - ISBN-13: 9788896301067 (formato e-book)</p> <p>Autori Vari, 2015 - La patata. Ed. HRE Edizioni Collana Coltura &amp; cultura. ISBN-10: 8865131489 - ISBN-13: 9788865131480 (formato e-book)</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)
3	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 herbaceous grafting. Propagation of geophytes
1	Soil disinfestation: chemical, physical and biological methods
12	Diffusion, economic relevance, botanical classification, morphophysiological characteristics, techniques and cycles of cultivation of the following horticultural species: tomato, artichoke, melon, potato.
12	Diffusion, economic relevance, botanical classification, morphophysiological characteristics, techniques and cycles of cultivation of the following cut flower species: rose, carnation, chrysanthemum, gerbera.

<b>Hrs</b>	<b>Practice</b>
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, lilium, amaryllis; artichoke propagation by rooted shoots; pinching and disbudding of chrysanthemum, carnation, rose and gerbera; potato seeds and sprouting techniques.
<b>Hrs</b>	<b>Others</b>
10	Technical excursion to vegetable and cut flower sicilian farms