

COURSE OF STUDY

ACADEMIC YEAR: 2023-2024

ACADEMIC SUBJECT: Innovative and sustainable vegetable cultivation

General information	
Year of the course	<i>Second year</i>
Academic calendar (starting and ending date)	
Credits (CFU/ETCS):	3
SSD	<i>AGR/04</i>
Language	<i>English</i>
Mode of attendance	<i>In presence</i>

Professor/ Lecturer	
Name and Surname	Angelo Signore
E-mail	angelo.signore@uniba.it
Telephone	+39 080 5443097
Department and address	<i>Department of Soil, Plants and Food Sciences - via Amendola 165/A 70126 – Bari</i>
Virtual room	<i>Teams code: qibztc3</i>
Office Hours (and modalities: e.g., by appointment, on line, etc.)	Flexible, but better to contact before (by email, phone, personally)

Work schedule			
Hours			
Total	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
<i>30</i>	<i>27</i>	<i>6</i>	
CFU/ETCS			
<i>3</i>	<i>2.6</i>	<i>0.4</i>	

Learning Objectives	<i>To train a professional able to carry out their own functions of AgriFood Innovation Broker.</i>
Course prerequisites	<i>General knowledges of agronomy</i>

Teaching strategie	<i>The lessons will be done by the means of power point, and with the support of didactic videos, either online or offline. The frontal lessons will be integrated with practises, and all the course material will be available (and downloadable) from an online platform.</i>
Expected learning outcomes in terms of	
Knowledge and understanding on:	<ul style="list-style-type: none"> ○ Innovative techniques aiming at decreasing the impact of vegetables' crops (soil-less systems, solarization, herbaceous grafting, anaerobic soil disinfestation) ○ Agronomic techniques to improve the quality of vegetables (biofortification) ○ Definition of "new" vegetables' products (microgreens, non-conventional vegetables, agrobiodiversity)

	<ul style="list-style-type: none"> ○ Artificial lightning (by the means of LEDs) to improve the nutritional traits of vegetable and to extend their cultivation all year round
Applying knowledge and understanding on:	<ul style="list-style-type: none"> ○ Reduce the impact of vegetables' crops on environment ○ Improve nutritional traits ○ Define new categories of products ○ Manage soil-less systems ○ Fertigation management ○ Use of biostimulants
Soft skills	<ul style="list-style-type: none"> ● Making informed judgments and choices <ul style="list-style-type: none"> ○ Manage in a sustainable way a vegetables' crop by using the most advanced techniques for their production ○ Define new commercial categories by using agrobiodiversity knowledge and innovative systems for their cultivation ● Communicating knowledge and understanding <ul style="list-style-type: none"> ○ Inform the farmers about the most sustainable way of cropping ○ Guide the farmer to the definition of the products that may face the market's requests ● Capacities to continue learning <ul style="list-style-type: none"> ○ Implement the knowledge acquired during the course to the different situations that may face by analysing the farmer's needs and searching for the most appropriate solutions
Syllabus	
Content knowledge	To train a professional able to carry out their own functions of Agri-Food Innovation Broker.
Texts and readings	Book: "Orticoltura. Principi e pratica" Reviews on the topics of the course
Notes, additional materials	Electronic material given by the professor
Repository	

Assessment	
Assessment methods	Oral
Assessment criteria	<ul style="list-style-type: none"> ● Knowledge and understanding <ul style="list-style-type: none"> ○ Focus on some topics of the course ● Applying knowledge and understanding <ul style="list-style-type: none"> ○ Integrate the knowledge of the different topics to manage a vegetable cultivation (e.g. the solarization and the environment in which is possible to be applied, etc.) ● Autonomy of judgment <ul style="list-style-type: none"> ○ Verify if the student is able to formulate a judgment regarding the acquired knowledge on different scenarios ● Communicating knowledge and understanding <ul style="list-style-type: none"> ○ Verify if the student is able to explain in simple word why a farmer, or a technician, should apply his/her suggestions ● Communication skills <ul style="list-style-type: none"> ○ Property of expression, ease of language for technical terms ● Capacities to continue learning <ul style="list-style-type: none"> ○ The student would be able to apply new insights to what has learned during the course?
Final exam and grading criteria	The final grade is awarded out of thirty. The exam is passed when the grade is greater than or equal to 18/30.
Further information	