

General Information	
Academic subject	Fruit Tree Science
Degree Course	Agricultural Sciences and Technologies (L-25)
ECTS credits	6 (4 ECTS Lectures + 2 ECTS Laboratory and Field classes)
Compulsory attendance	No
Language	Italian

Professor	Name Surname	Mail address
	Giuseppe Ferrara	giuseppe.ferrara@uniba.it

ECTS details	Area	SSD	Credits
	Plant Production	AGR/03	6

Class Schedule	
Period	Second Semester
Year	Second year
Type of class	Lectures, 4 ECTS (32 hours) Laboratory and field classroom and workshops, 2 ECTS (28 hours)

Time management	
Hours	150
In-class study hours	60 (32 hours of lectures + 28 hours of field and laboratory activities)
Out-of-class study hours	90

Academic calendar	
Class begins	March 2, 2020
Class ends	June 12, 2020

Syllabus	
Prerequisites/requirements	Knowledge of biology, botany, agronomy.
Expected learning outcomes (according to Dublin Descriptors)	<ul style="list-style-type: none"> • <i>Knowledge and understanding</i> <ul style="list-style-type: none"> ○ Knowledge and understanding of morphology, physiology and cultural practices (from propagation to harvest) of fruit tree species in Mediterranean climate. • <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> ○ Capacity to evaluate the influence of environmental and cultural factors on the vegetative and yield aspects of a fruit crop towards a more sustainable management of the orchard. • <i>Making informed judgements and choices</i> <ul style="list-style-type: none"> ○ Capacity to evaluate and suggest the best species/varieties to be grown in different growing areas. ○ Capacity to suggest the different cultural practices for a sustainable management of the orchard. • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ Capacity to explain acquired knowledge with an appropriate and technical speech. • <i>Capacities to continue learning</i> <ul style="list-style-type: none"> ○ Capacity to improve knowledge acquired during class with further readings of technical and scientific papers. <p>The results of expected understanding, in terms of knowledge and abilities, are reported in Annex A of the Didactic Regulation of the Master Degree in Agricultural Sciences and Technologies (as European descriptors for Degree; Plant Production area).</p>
Topics of the Course	Morphology and physiology of fruit tree species: Root system; canopy; vegetative cycle; reproductive cycle.

	<p>Propagation: Sexual and vegetative.</p> <p>Pruning and training systems. Winter and summer pruning. Vertical and horizontal trellising.</p> <p>Orchard management: Irrigation, nutrition, soil management, harvest.</p> <p>Fruit ripening and quality. Physiology of fruit growth and ripening. Time and type of harvesting. Fruit quality.</p>
--	--

Course Program	
Bibliography	<ul style="list-style-type: none"> • Appunti dalle lezioni e materiale didattico distribuito durante il corso. • Baldini e Marangoni – 1997. Coltivazioni arboree. Thema Club. • Sansavini S., Costa G., Gucci R., Inglese P., Ramina A., Xiloyannis C. Arboricoltura generale. Pàtron editore S.r.l., 2012. • AA.VV. - 1991. Frutticoltura speciale. Edizioni REDA, Roma.
Notes	
Teaching methods	Lectures will be given with Power Point presentations, videos, activities in lab and field.
Assessment methods	<p>A midterm oral exam is scheduled for students enrolled to the Course. This exam will test the course's information at that date of the semester. The midterm exam is expressed as 30 and if passed, in the following oral exam the rest of the course's information will be tested. The joint results of the two exams will give the final score expressed as 30.</p> <p>The final exam will consist on an oral test, as reported in the Guidelines of the Master Degree of Agricultural Sciences and Technologies (art. 9) and in the Annex A.</p> <p>The evaluation of the student will be based on established criteria, as explained in the Annex A of the Master Degree of Agricultural Sciences and Technologies. The final grade will be an average of both the midterm and final exam.</p> <p>For foreign student the exam consists of an oral test in English with questions related to the course's information.</p>
Evaluation criteria	<ul style="list-style-type: none"> • <i>Knowledge and understanding</i> <ul style="list-style-type: none"> ○ Description of morpho-physiological characteristics of fruit tree species. • <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> ○ Application of knowledge on vegetative and productive cycles of fruit tree species. ○ Ability to know and use the different propagation techniques. ○ Description of the cultural practices to be used for a sustainable management of the orchard. • <i>Making informed judgments and choices</i> <ul style="list-style-type: none"> ○ Advice the best and more sustainable cultural practices according to the physiology of the fruit tree species. • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ Explain the acquired knowledge with an appropriate speech. ○ Ability to give oral presentations on the acquired knowledge for educational purposes. • <i>Capacities to continue learning</i>

	<ul style="list-style-type: none">○ Ability to manage species/varieties according to physiological and environmental parameters in order to achieve the best yields.○ Improve knowledge with readings of technical and scientific papers.
Further information	Visiting hours Every day from 8.30 to 13.30 pm