

General Information	
Academic subject	Fruit trees productions and quality of raw materials (I.C. Quality of vegetable raw matters)
Degree course	Bachelor programme: Food Science and Technology
ECTS credits	3 ECTS
Compulsory attendance	No
Teaching language	Italian

Subject teacher	Name Surname	Mail address	SSD
	<b>Marino Palasciano</b>	<a href="mailto:marino.palasciano@uniba.it">marino.palasciano@uniba.it</a>	AGR/03

ECTS credits details		
Basic teaching activities	2 ECTS Lectures	1 ECTS Laboratory or field classes

Class schedule	
Period	II semester
Course year	First
Type of class	Lecture- workshops, field classes

Time management	
Hours	75
In-class study hours	30
Out-of-class study hours	45

Academic calendar	
Class begins	March 4 <sup>th</sup> , 2019
Class ends	June 14 <sup>th</sup> , 2019

Syllabus	
Prerequisites/requirements	Principles of Biology and General Botany.
Expected learning outcomes	<p><i>Knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Knowledge of the morph-physiological and production management of fruits plants</li> </ul> <p><i>Applying knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Skill to apply a systemic approach to the evaluation of fruit quality control factors to the assessment of the composition and the destination of the production</li> <li>○ Understanding phenomena and constituents determining fruits quality and its evolution</li> </ul> <p><i>Making informed judgements and choices</i></p> <ul style="list-style-type: none"> <li>○ Correctly advising solutions to change properties and quality of fruits</li> <li>○ Correctly advising analytical approaches to monitor properties and quality of fruit production</li> </ul> <p><i>Communicating knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Skill to describe the main nutritional and nutraceutical utilities of the fruits and their essential characteristics for the specific use (fresh consumption and/or industrial transformation)</li> </ul> <p><i>Capacities to continue learning</i></p> <ul style="list-style-type: none"> <li>○ Updating the knowledge of main fruits chain.</li> </ul> <p>The expected learning outcomes, in terms of both knowledge and skills, are provided in Annex A of the Academic Regulations of the Course in Food Science and Technology (expressed through the European Descriptors of the qualification)</p>

Contents	<ul style="list-style-type: none"> <li>○ Drupacee, Pomacee, Grape and Olive crops: systematic framework, origin and spread, botanical characteristics and phenological stages, flowering and fruiting biology; interactions between phenology and physiology of the species, training systems, main cultivars and criteria for their classification, marketing of products.</li> <li>○ Definition of fruit organoleptic quality and methods of determination according to the destinations of their productions.</li> <li>○ Factors quality monitoring results in relation to the management of soil and plant: monitoring nutritional and water status of fruit trees, fertilization and fruit quality. Using of phytohormones to improve fruit quality.</li> </ul>
Course program	
Reference books	<ul style="list-style-type: none"> <li>● Lecture notes and educational supplies provided during the course.</li> <li>● AA.VV. Frittiltura Speciale REDA Roma 1991</li> <li>● AA.VV. Arboricoltura Generale, Patron editore Bologna 2012</li> <li>● Scientific reviews</li> </ul>
Notes	
Teaching methods	<p>Lectures will be presented through PC assisted tools (PowerPoint, video). Field and laboratory classes, reading of regulations will be experienced.</p> <p>Lecture notes and educational supplies will be provided by means of online platforms (i.e.: Edmodo)</p>
Evaluation methods	<p>The exam consists of an oral dissertation on the topics developed during the theoretical and theoretical-practical lectures in the classroom and in the laboratory/production plants, as reported in the Academic Regulations for the Bachelor Degree in Food Science and Technology (article 9) and in the study plan (Annex A).</p> <p>Students attending at the lectures may have a middle-term preliminary exam, consisting of a written test, relative to the first part of the program, which will concur to the final evaluation and will be considered valid for a year.</p> <p>The evaluation of the preparation of the student occurs on the basis of established criteria, as detailed in Annex B of the Academic Regulations for the Bachelor Degree in Food Science and Technology.</p> <p>Non-Italian students may be examined in English language, according to the aforesaid procedures..</p>
Evaluation criteria	<p><i>Knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Describing the main the morph-physiological and production management of fruits plants</li> </ul> <p><i>Applying knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Describing phenomena and constituents determining the characteristics and the quality of fruits dealt with during lessons</li> </ul> <p><i>Making informed judgements and choices</i></p> <ul style="list-style-type: none"> <li>○ Expressing reasonable hypotheses about solutions to change properties and quality of fruit productions dealt with during lessons</li> </ul> <p><i>Communicating knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Describing the main nutritional and nutraceutical functions of the fruits and their essential characteristics for the specific use (fresh consumption and/or industrial transformation)</li> </ul> <p><i>Capacities to continue learning</i></p>

	<ul style="list-style-type: none"><li>○ Expressing reasonable hypotheses about the evaluation of quality chain dealt with during lessons</li></ul>
Receiving times	Thursday 9.00 a.m. – 12.30 p.m. by appointment only