

General information	
Academic subject	Genetic approaches for resilience to climate change
Degree course	INNOVATION DEVELOPMENT IN AGRIFOOD SYSTEMS (IDEAS)
ECTS credits	3 ECTS (2 ECTS of Lectures + 1 ECTS of laboratory or field classes)
Compulsory attendance	No
Teaching language	english

Subject teacher	Name Surname	Mail address
	Stefano Pavan	stefano.pavan@uniba.it

ECTS credits details	
	2 ECTS Lectures 1 ECTS Laboratory or filed classes

Class schedule	
Period	I semester
Course year	Second
Type of class	Lectures Practical classes

Time management	
Hours	76
In-class study hours	30
Out-of-class study hours	46

Academic calendar	
Class begins	October 18 th , 2021
Class ends	January 28 th , 2022

Syllabus	
Prerequisites/requirements	Prerequisites: "Genetics".
Expected learning outcomes	<p><i>Knowledge and understanding</i> o Students will acquire notions on genetic aspects and breeding strategies related to adaptation to climate change</p> <p><i>Applying knowledge and understanding</i> o The course aims to deliver knowledge on how to apply suitable strategies enabling to cope with ongoing climate changes</p> <p><i>Making informed judgements and choices</i> o. The student will acquire the capacity to evaluate approaches aimed at the development of new cultivars in a climate change scenario</p> <p><i>Communicating knowledge and understanding</i> o. Communicating the importance of genetics and breeding to deliver cultivars suitable to sustainable farming systems and resilient to climate changes</p> <p><i>Capacities to continue learning</i> Ability of deepening and updating knowledge on strategies to develop climate change resilient crops</p>
Contents	<ul style="list-style-type: none"> • Plant breeding objectives in a climate change scenario • Genetic resources and genes associated with plant adaptation. • Conventional and gene-based breeding methods to develop climate-resilient cultivars. • <i>De novo</i> domestication of climate resilient crops

Course program	
Reference books	<ul style="list-style-type: none"> Lecture notes and other educational materials distributed during the classes (also made available online)
Notes	
Teaching methods	Lectures will be given with the aid of Power Point presentations and in laboratories. Lecture notes and educational supplies will be provided by means of a mailing list or online platforms (i.e.: Edmodo, Google Drive...)
Evaluation methods	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.
Evaluation criteria	<p><i>Knowledge and understanding</i> Knowledge and understanding of genetic aspects and breeding methods suitable for the development of climate resilient cultivars</p> <p><i>Applying knowledge and understanding</i> Applying knowledge and understanding to the plant breeding and political sectors</p> <p><i>Making informed judgements and choices</i> Evaluating the suitability of strategies aimed to select germplasm coping with ongoing climate change</p> <p><i>Communicating knowledge and understanding</i> Correct exposure and language proficiency will be evaluated with marks of excellence.</p> <p><i>Capacities to continue learning</i> Interest in the field and completeness of preparation</p>
Receiving times	Monday-Friday upon e-mail request