



## PLANT MOLECULAR BIOLOGY AND BIOTECHNOLOGY

Enrollment year	2016/2017
Academic year	2017/2018
Regulations	DM270
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	
Curriculum	PERCORSO COMUNE
Year of study	2°
Period	1st semester (01/10/2017 - 14/01/2018)
ECTS	6
Language	English

The activity is split

504226 - PLANT MOLECULAR BIOLOGY AND BIOTECHNOLOGY - I

504227 - PLANT MOLECULAR BIOLOGY AND BIOTECHNOLOGY - II



## PLANT MOLECULAR BIOLOGY AND BIOTECHNOLOGY - I

Enrollment year	2016/2017
Academic year	2017/2018
Regulations	DM270
Academic discipline	BIO/04 (PLANT PHYSIOLOGY)
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	
Curriculum	PERCORSO COMUNE
Year of study	2°
Period	1st semester (01/10/2017 - 14/01/2018)
ECTS	3
Lesson hours	24 lesson hours
Language	English
Activity type	ORAL TEST
Teacher	BALESTRAZZI ALMA (titolare) - 1.5 ECTS DE SOUSA ARAUJO SUSANA - 1.5 ECTS
Prerequisites	=Basic knowledge molecular and cellular biology is required.
Learning outcomes	=This part of the course aims at highlighting the molecular aspects of plant meristem activity and key molecular players (genes, proteins, phytohormones) in plant totipotency.
Course contents	Molecular aspects of plant cell totipotency. Shoot and root apical meristems (SAM, RAM): identity, activity, response to stress. Molecular cross-talk between phytohormones.
Teaching methods	Frontal lessons
Recommened or required readings	no text books are suggested but specialized articles on international scientific journals

<b>Assessment methods</b>	Written essay and oral exam
<b>Further information</b>	Written essay and oral exam
<b>Sustainable development goals - Agenda 2030</b>	<a href="#">\$lbl legenda sviluppo sostenibile</a>



### PLANT MOLECULAR BIOLOGY AND BIOTECHNOLOGY - II

Enrollment year	2016/2017
Academic year	2017/2018
Regulations	DM270
Academic discipline	BIO/04 (PLANT PHYSIOLOGY)
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	
Curriculum	PERCORSO COMUNE
Year of study	2°
Period	1st semester (01/10/2017 - 14/01/2018)
ECTS	3
Lesson hours	24 lesson hours
Language	English
Activity type	ORAL TEST
Teacher	MACOVEI ANCA - 3 ECTS
Prerequisites	Basic knowledge molecular and cellular biology is required
Learning outcomes	This part of the course aims at highlighting the importance of plant biotechnology, providing past and current approaches in plant genetic modification (GM) technology of high impact for the agro-economic sectors
Course contents	Plant biotechnology: classification and impact. Genetically Modified Plants: technology and essential applications. Molecular farming: use of plants for the production of relevant biomolecules
Teaching methods	Frontal lessons
Recommeneded or required readings	Specialized articles on international scientific journals are suggested instead of text books

<b>Assessment methods</b>	Written essay and oral exam
<b>Further information</b>	Written essay and oral exam
<b>Sustainable development goals - Agenda 2030</b>	<a href="#">\$lbl legenda sviluppo sostenibile</a>