Research Doctorate in AGRI-FOOD SCIENCES, TECHNOLOGIES AND BIO-TECHNOLOGIES
Teaching Plan 2019

NOTE: the rooms for the lessons will be decided and notified time by time.

TOPIC and TEACHER	DAY and TIME	DFC	Notes
Course CIGS	To be defined		
Course by UNIMORE Research Office	To be defined		for all UNIMORE PhD students, in Italian
"Scientific English"; prof. Adrian Wallwork	14, 15, 28 and 29 January 2019	10	Mandatory for all
"Animal Conservation Genetics"; Prof Félix Meutchieye	5 March 2019, 9.00-13.00 6 March 2019, 11.00-13.00 7 March 2019, 11.00-13.00 room H1.3 (ex-room 3)	4	
"Introduction to MATLAB environment"; Dr. Rosalba Calvini	11 March 2019, 14.30-17.00 18 March 2019, 14.30-17.00 25 March 2019, 14.30-17.30 room H1.2 (ex- room 5)	4	
"From the Crime Scene to the Court: the role of insects in forensic investigations"; Dr. Stefano Vanin	17 May 2019, 11.00-13.00 room H0.1 (ex- room 1)	1	

"The model organism *Saccharomyces cerevisiae*: mitochondrial inheritance as case study"; dr. Lisa Solieri - Part I. Yeast model concept, physiological and biological features, life cycle, genome project, the *Saccharomyces cerevisiae* pan-genome - Part II. Deletion mutant libraries (EUROFAN project, YGDP, TRIPLES), introduction to *Saccharomyces cerevisiae* system biology, mitochondrial inheritance (introduction to genomic, mitochondrial nucleoid and organelle perspectives)	**29 May 2019, 11.00-13.00** **29 May 2019, 14.00-16.00** room H0.1 (ex- room 1)	**2**	
"Model Plants"; dr. Justyna Anna Milc Model plants I - Model plant concept - *Arabidopsis* (genome sequence/transformation/mutagenesis/TILLING/ natural variation/Arabidopsis community/bioinformatic resources) Model plants II - Rice (genome sequence; bioinformatic resources; comparative genomics) - *Brachypodium* (genome sequence; germplasm & mutant collections; natural diversity; bioinformatic resource; case study: transcriptional profiling of *Brachypodium* – pathogen interaction)	**02 October 2019, 9.00-11.00** **09 October 2019, 9.00-11.00**	**2**	**"Biological Models"** **Mandatory** **for the 1st year**
"Animal models"; prof. Gian Carlo Manicardi	**04 October 2019, 14.30-16.30**	**1**	

Course by UNIMORE Library BSI "La ricerca dell'informazione scientifica e La gestione delle citazioni bibliografiche nel lavoro scientifico" Include "Come pubblicare un'opera scientifica" (A. Born)	4, 6, 11 and 13 June 2019 http://www.m3es.unimore.it/site/home/ education/courses-calendar.html	8	for all UNIMORE PhD students, in Italian
"Method set-up for the identification and quantification of food contaminants"; dr. Giuseppe Montevecchi	06 June 2019, 10.00 - 12.00 room H0.1 (ex- room 1)	1	
"Introduction to Mendeley: Theory and practice"; Dr. Serge Kameni Leugoue	07 June 2019, 11.00 – 13.00 room 1/A	1	
"Applications of multivariate analysis in the agri-food context"; prof. Alessandro Ulrici	12 June 2019, 14.30-17.30 14 June 2019, 14.30-17.00 17 June 2019, 14.30-17.00 room H1.2 (ex- room 5)	4	
"Management and exploitation of bioresources: the fundament roles of the Microbial Culture Collections"; dr. Luciana De Vero	4 July 2019, 9.30-11.30 Kennedy Lab., Biology Room	1	
"Insect Molecular Genetics"; prof. Mauro Mandrioli	08 July 2019, 14.30-18.30 Room H0.1 (ex- room 1)	2	
"Colour and chemical imaging: RGB and hyperspectral image analysis for food monitoring"; dr. Rosalba Calvini	05 September 2019, 14.30 - 16.30 [*] 06 September 2019, 14.30 - 16.30 [*]	2	

[*]changed

"Microbial Biotechnologies for Biorefineries"; dr. Alberto Amaretti	**18 September 2019, 9.00-13.00**	**2**	
"Food bioactive compounds"; dr. Davide Tagliazucchi	**18 September 2019, 14.00-16.00** **19 September 2019, 14.00-16.00**	**2**	
"Chemical Sensors and Biosensors"; prof. Renato Seeber	**24 September 2019, 15.00 – 17.00** **26 September 2019, 15.00 – 17.00** **27 September 2019, 15.00 – 17.00**	**3**	
"Pest Risk Analysis and Management of Alien Pests" - **Introduction to Pest Risk Analysis (PRA); prof. Emilio Stefani** - **The EFSA Plant Health Panel methodology for quantitative Pest Risk Assessment; prof. Gianni Gilioli** - **Management of alien pests; dr. Lara Maistrello**	**25 September 2019, 9.00 - 11.00** **25 September 2019, 11.00 - 13.00** **25 September 2019, 14.00 - 16.00**	**3**	
"Functional Genomics Approaches in Crop Plants"; dr. Enrico Francia **Module-1** - **Biparental populations and development of Genetic maps** - **Germplasm collections and Genome-Wide Association Studies** - **LD-based vs biparental QTL mapping** **Module-2** - **Candidate genes approach** - **Physical mapping and de novo sequencing** - **Structural variations in genomes: copy-number variants and QTLs**	**2 October 2019, 11.00-13.00** **9 October 2019, 11.00-13.00**	**2**	

"Innovation in food yeast starter cultures: current state, perspectives and limits" dr. Lisa Solieri "Application of lactic acid bacteria for healthy and sustainable dairy food systems: starter cultures, probiotic potential and beyond" dr. Lisa Solieri	3 October 2019, 11.00-13.00 3 October 2019, 14.00-16.00	2	
"Infrared spectroscopy in food analysis"; dr. Giorgia Foca	08 October 2019, 14.00-16.00 09 October 2019, 14.00-16.00	2	
"Crop Physiology and Precision Agriculture to close the yield gap between conventional and low input cropping systems"; dr. Domenico Ronga Module-1 The agricultural research towards 2050: Sustainable management of natural resources Module-2 Cropping systems and climate change Module-3 Integrating soil and crop sensing methods to support fertilization	 28 October 2019, 14.00-16.00 29 October 2019, 14.00-16.00 30 October 2019, 14.00-16.00	3	

NOTES

The "Biological Models" (5DFC) courses are mandatory for all students, and should be attended if possible during the 1st year.

The course of Scientific English (10 DFC) is mandatory for all students.

All the other courses may be selected by all students, until reaching the total amount of 30 DFC, if possible with the following scheme:

- 12 DFC for the 1st year

- 4 DFC for the 2nd year

- 4 DFC for the 3rd year

- 10 DFC for the course of Scientific English, over the three years

The total amount of DFC can be reached also by attending lessons and courses external to STEBA, with suitable topics, and by providing a certificate of attendance.