

Research Doctorate in AGRI-FOOD SCIENCES, TECHNOLOGIES AND BIO-TECHNOLOGIES

Teaching Plan 2018

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	9	
Course by UNIMORE Research Office	To be defined		for all UNIMORE PhD students, in Italian
Course by UNIMORE Library BSI	30 May, 9.00-13.00 1 June 14.00-18.00 5 June 9.00-13.00 7 June 14.00-18.00		for all UNIMORE PhD students, in Italian
Scientific English; prof. Adrian Wallwork	16 January 2018: 13.30 - 16.30 17 January 2018: 09.30-12.30, 13.30-15.30 18 January 2018: 09.30-11.30 6 February 2018: 13.30 - 16.30 7 February 2018: 09.30-12.30, 13.30-15.30 8 February 2018: 09.30-11.30	10	Compulsory for all
"Infrared spectroscopy in food analysis"; dr. Giorgia Foca	09 October, 14.30-16.30 10 October, 14.30-16.30	2	
"Food bioactive compounds"; dr. Davide Tagliazucchi	13 September, 9.00-11.00 20 September, 9.00-11.00	2	
"Insect Molecular Genetics"; prof. Mauro Mandrioli	09 July, 14.30-16.30 10 July, 14.30-16.30	2	

“Animal models”; prof. Gian Carlo Manicardi	05 October, 14.30-16.30	1	“Biological Models” Compulsory for the 1 st year
"Model Plants"; dr. Justyna Anna Milc Model plants I - Model plant concept - <i>Arabidopsis</i> (genome sequence/transformation/mutagenesis/ TILLING/ natural variation/Arabidopsis community/bioinformatic resources) Model plants II - Rice (genome sequence; bioinformatic resources; comparative genomics) - <i>Brachypodium</i> (genome sequence; germplasm & mutant collections; natural diversity; bioinformatic resource; case study: transcriptional profiling of <i>Brachypodium</i> – pathogen interaction)	21 September, 9.00-11.00 02 October, 9.00-11.00	2	
“The model organism <i>Saccharomyces cerevisiae</i> : mitochondrial inheritance as case study”; dr. Lisa Solieri - Part I. Yeast model concept, physiological and biological features, life cycle, genome project, the <i>Saccharomyces cerevisiae</i> pan-genome - Part II. Deletion mutant libraries (EUROFAN project, YGDP, TRIPLES), introduction to <i>Saccharomyces cerevisiae</i> system biology, mitochondrial inheritance (introduction to genomic, mitochondrial nucleoid and organelle perspectives)	29 May, 11.00-13.00 29 May, 14.00-16.00	2	
“Innovation in food yeast starter cultures: current state, perspectives and limits”; dr. Lisa Solieri - Sex-determination systems drive genetic diversity in food yeasts - Application of Lactic acid bacteria in dairy food science: starter cultures and probiotic potential	3 October, 11.00-13.00 3 October, 14.00-16.00 Kennedy Lab.	2	
"Microbial Collection"; dr. Luciana De Vero	5 July, 9.30-11.30	1	Biology room, via Kennedy

“Applications of multivariate analysis in the agri-food context”; prof. Alessandro Ulrici	12 June, 14.30-17.30 14 June, 14.30-17.00 19 June, 14.30-17.00	4	
“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, 11.00-13.00 9 October, 11.00-13.00	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	11 October, 14.00-16.00 16 October, 14.00-16.00 23 October, 14.00-16.00	3	

“Innovative applications of acetic acid bacteria: the organism inside the process”; dr. Maria Gullo	12 October, 10.00-12.00 15 October, 10.00-12.00 Kennedy lab.	2	
“Colour and chemical imaging: RGB and hyperspectral image analysis for food monitoring”; dr. Rosalba Calvini	12 September, 14.30 - 16.30 13 September, 14.30 - 16.30	2	
“Pest Risk Analysis and Management of Alien Pests” - Pest risk analysis: general concepts, quantification of risks, case studies; prof. Gianni Gilioli and Emilio Stefani - Management of alien pests; dr. Lara Maistrello	25 September, 9.00 - 13.00 25 September, 14.00 - 16.00	3	
“Method set-up for the identification and quantification of food contaminants”; dr. Giuseppe Montevicchi	06 June, 10.00 - 12.00	1	
“Chemical Sensors and Biosensors”; prof. Renato Seeber	24 September, 15.00 – 17.00 26 September, 15.00 – 17.00 27 September, 15.00 – 17.00	3	
“Teaching in the field of food quality assessment, with focus on gastronomy and culinary technique”; prof. Liana Salanta	07 May, 9.00-11.00 room 4 08 May, 9.00-11.00 room 4 09 May, 9.00-11.00 room 4 10 May, 9.00-11.00 Biology Room, Via Kennedy	4	
“Teaching in the field of food quality assessment, with focus on food microbiology”; prof. Carmen Pop	07 May, 11.00-13.00 08 May, 9.00-11.00 09 May, 9.00-11.00 10 May, 9.00-11.00 room 5	4	

NOTES

The “Biological Models” courses are compulsory for the students of the 1st year. The course of Scientific English is compulsory for all students. All the other courses may be selected without distinction by all students, regardless of the curriculum to which they belong, until reaching the total amount of DFC (20), if possible with the following scheme:

- 12 DFC for the 1st year
- 4 DFC for the 2nd year
- 4 DFC for the 3rd year

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.