

Teaching proposal for PhD students of first year (40° Cycle – AA 2024-25)

12.5 CFU of compulsory courses + 2.5 CFU of eligible courses

9 compulsory courses for Crop Science (12.5 CFU), as follows:

Course name	Teacher(s)	Hours	ECTS
Experimental design in Crop Science: principles	L. Marini (DAFNAE)	8	1
Experimental design in Crop Science: from lab to field	L. Marini (DAFNAE)	8	1
Navigating the peer review process	L. Marini (DAFNAE)	8	1
Scientific Writing in English	M.E. Olson (external expert)	32	4
Basic Statistics	G. Zuecco, T. Sitzia (TESAF)	16	2
Applied Statistics with applications in R	A.Cecchinato, S. Pegolo (DAFNAE)	16	2
Experimental design with R: from theory to practice	R. Mantovan, I. Piccoli (DAFNAE)	12	1,5
Health and Safety at work	<u>on line course (see here)</u>		NO ECTS
Welcome to research (AFS and CS)	N. Bertin (external expert)		NO ECTS
Total			12,5

2.5 CFU chosen from the following 25 eligible courses:

Course name	Teacher(s)	Hours	ECTS
Climate change and forests	D. Castagneri, A. Prendin (TESAF, UNIPD)	12	1,5
Analysis and interpretation of transcriptomic data	Giovanni Battista Tornielli (DAFNAE, UNIPD)	16	2
Modeling and big data for biological systems	Mario Putti (DAFNAE) - Elena Bachini (Matematica)	24	3
Advanced Statistics with R: Mixed models	C. Sartori (DAFNAE, UNIPD)	16	2
Geostatistics	M. Borgia, G. Zuecco (TESAF, UNIPD)	16	2
Introduction to GIS	R. Rossi (DICEA, UNIPD)	16	2
Geomatics and Earth surface modelling	F. Pirotti (TESAF, UNIPD)	16	2
The role of principal investigator	G. Renella (DAFNAE, UNIPD)	8	1
Introduction to your entrepreneurial post-doc life	A. Leonardi (external expert)	2,5	0,3
Spatial statistics in regional economics	F. Pagliacci (TESAF, UNIPD)	16	2
Media Training	K. Leech (external expert)	4	0,5
A better PhD experience: practical tools to improve your impact and self-efficacy	A. Moriggi (TESAF, UNIPD)	16	2
How to prepare and present a scientific paper	S. Segato (DAFNAE, UNIPD), D. Pettenella (TESAF, UNIPD)	12	1,5
Dissemination of science: contents and tools	M. Polidoro (external expert)	12	1,5
Ethics in writing and reviewing	M.Borgia (TESAF, UNIPD)	4	0,5
The evaluation of research output	L. Cei (TESAF, UNIPD)	8	1
Exploring with humans: from individual to collective data collection tools and techniques	L.Secco, E.Pisani, A. Moriggi (TESAF, UNIPD), R. Da Re (external expert)	24	3
Living organisms as biorefineries toward a more sustainable future	Van Zyl (external expert)	4	0,5
Biotechnological approaches in the biorefinery concept	Van Zyl (external expert)	4	0,5
Science communication: Public speaking	External expert	4	0,5
Science communication: Social media	External expert	4	0,5
THE AI ACCELERATION: Opportunities and Challenges of Large Language Models & Foundation Models for Academic Research and Education	C. Furlanello (HK3 Lab, Orobix Life - Rovereto/Bergamo) (external expert)	4	0,5
English and Italian languages	Centro Linguistico di Ateneo		NO ECTS
Italian languages for foreigners	Centro Linguistico di Ateneo		NO ECTS
Research integrity: pills of ethics before spritz break	M. Giantin (BCA, UNIPD), A. Squartini (DAFNAE, UNIPD)		NO ECTS