

Area dei Servizi Istituzionali Unità di staff Dottorati di ricerca

ATTACHMENT 1

LAST REVISED 19/03/2022

PhD IN ENVIRONMENTAL LIFE SCIENCES (under the agreement with the University of Udine) OVERVIEW

IN BRIEF						
Lines of research covered by the ERC panels	1	PE10_4	Terrestrial ecology, land cover change			
	2	PE10_5	Geology, tectonics, volcanology			
	3	PE10_9	Biogeochemistry, biogeochemical cycles, environmental chemistry			
	4	PE10_12	Sedimentology, soil science, palaeontology, earth evolution			
	5	LS2	Integrative Biology: from Genes and Genomes to Systems			
	6	LS8_1	Ecosystem and community ecology, macroecology			
	7	LS8_2	Biodiversity			
	8	LS8_4	Population biology, population dynamics, population genetics			
	9	LS8_5	Biological aspects of environmental change, including climate change			
	10	LS8_13	Marine biology and ecology			
	11	LS9_8	Applied plant sciences, plant breeding, agroecology and soil biology			
	12	LS9_12	Ecotoxicology, biohazards and biosafety			
Administrative location	University of Trieste					
Organizing Department	Department of Life Sciences					
Partner University	University of Udine					
Partner University Department	Department of Agricultural, Food, Animal and Environmental Sciences					
Duration	3 years					
Attendance abroad that entitles to a scholarship increase - min. max. of months for each PhD student (over 3 years)	0 - 18					
Official language	Italia	Italian				
Language (alternative to Italian) partially used in PhD activities	Part Stud	Part of the teaching program, and particularly part of the seminars, will be in English. Students can present annual reports and the final thesis in English.				
Subject Areas (in alphabetical code order)	04	EART	TH SCIENCES			
	05	BIOL	OGY			
	07	AGRI	CULTURAL AND VETERINARY SCIENCES			
<i>Macro Research Fields</i> (in alphabetical code order)	04/A	EAR	TH SCIENCES			
	05/A	PLAN	IT BIOLOGY			
	05/B	ANIM	AL BIOLOGY AND ANTHROPOLOGY			
	05/C	ECO	LOGY			
	05/G	EXPE	RIMENTAL AND CLINICAL PHARMACOLOGY			
	05/I	GEN	ETICS AND MICROBIOLOGY			

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	07/B	AGRICULTURAL AND FOREST SYSTEMS
	07/C	AGRICULTURAL, FOREST AND BIOSYSTEMS ENGINEERING
	07/E	AGRICULTURAL CHEMISTRY, AGRICULTURAL GENETICS AND PEDOLOGY
<i>Scientific Disciplinary Sectors</i> (in alphabetical code order)	AGR/02	AGRONOMY AND FIELD CROPS
	AGR/05	FOREST MANAGEMENT AND SILVICULTURE
	AGR/08	AGRICORULTAL HYDRAULICS AND WATERSHED PROTECTION
	AGR/10	RURAL BUILDINGS AND AGRO-FOREST LAND PLANNING
	AGR/13	AGRICULTURAL CHEMISTRY
	BIO/01	GENERAL BOTANY
	BIO/02	SYSTEMATIC BOTANY
	BIO/03	ENVIRONMENTAL AND APPLIED BOTANY
	BIO/04	PLANT PHYSIOLOGY
	BIO/05	ZOOLOGY
	BIO/07	ECOLOGY
	BIO/14	PHARMACOLOGY
	BIO/18	GENETICS
	GEO/08	GEOCHEMISTRY AND VOLCANOLOGY
Domain European Research Council	LS	LIFE SCIENCES
	PE	PHYSICAL SCIENCES AND ENGINEERING
ERC Panels	LS2	INTEGRATIVE BIOLOGY: FROM GENES AND GENOMES TO SYSTEMS FOR ALL ORGANISMS: GENETICS, EPIGENETICS, GENOMICS AND OTHER 'OMICS STUDIES, BIOINFORMATICS, SYSTEMS BIOLOGY, GENETIC DISEASES, GENE EDITING, INNOVATIVE METHODS AND MODELLING, 'OMICS FOR PERSONALISED MEDICINE
	LS8	ENVIRONMENTAL BIOLOGY, ECOLOGY AND EVOLUTION FOR ALL ORGANISMS: ECOLOGY, BIODIVERSITY, ENVIRONMENTAL CHANGE, EVOLUTIONARY BIOLOGY, BEHAVIOURAL ECOLOGY, MICROBIALECOLOGY, MARINE BIOLOGY, ECOPHYSIOLOGY, THEORETICAL DEVELOPMENTS AND MODELLING
	LS9	BIOTECHNOLOGY AND BIOSYSTEMS ENGINEERING BIOTECHNOLOGY USING ALL ORGANISMS, BIOTECHNOLOGY FOR ENVIRONMENT AND FOOD APPLICATIONS, APPLIEDPLANT AND ANIMAL SCIENCES, BIOENGINEERING AND SYNTHETIC BIOLOGY, BIOMASS AND BIOFUELS, BIOHAZARDS
	PE10	EARTH SYSTEM SCIENCE PHYSICAL GEOGRAPHY, GEOLOGY, GEOPHYSICS, ATMOSPHERIC SCIENCES, OCEANOGRAPHY, CLIMATOLOGY, CRYOLOGY, ECOLOGY, GLOBAL ENVIRONMENTAL CHANGE, BIOGEOCHEMICAL CYCLES, NATURAL RESOURCES MANAGEMENT

	WHO'S WHO
	In partnership with the University of Udine
Chair	Prof. Giorgio Alberti – Department of Agricultural, Food, Animal and Environmental Sciences - University of Udine – phone N.+39 0432 558608; fax +39 0432 558603; email giorgio.alberti@uniud.it
Vice	Prof. Antonio Terlizzi – Department of Life Sciences – University of Trieste - phone +39 040 5588829; email <u>aterlizzi@units.it</u>

PhD Academic Board	List of members		
Web site	https://sites.google.com/view/phd-envlifesci/home		
Courses and seminars	https://sites.google.com/site/phdenvlifesci/Courses and seminars		
email	dottorato.ambientevita@units.it		
Course description and objectives	The PhD Course aims to prepare well-qualified scientists able to critically manage the implementation of EU and national regulations concerning with environmental analysis and to autonomously develop research activities in the field of environment. The course is focused on both theoretical and experimental activities.		
Job placement opportunities	Possible job placements are mainly in the environmental research field at national or international universities or research institutions, both in marine and terrestrial area of interest.		
	The considerable interdisciplinary approach characteristic of this PhD course will allow the training of new and complete professional figures that will afford multidisciplinary scientific issues.		
	 Methodologies learnt during the PhD course will apply to complex themes like: effects of global change on different natural ecosystems (from deep ocean to high mountains) or man-managed ones (agro-ecosystems, forestry, and so on); the biodiversity role in maintaining ecosystem efficiency and goods and service production; the onset of new pollution sources, the appearance of new pollutants and their effects on organisms, the management of new productive close – loop systems, the digitalization of environmental data to spreading them to the public for stimulating a general increase in the ecological awareness. 		
Main cooperating international	1 Hopkins Marine Station, Stanford University, USA		
Universities and Research Institutions	2 Department of Environmental Sciences, Zhejiand University, China		
	3 Cornell University, USA		
	4 Institute of Botany, University of Innsbruck, Austria		
	5 Los Alamos National Laboratory, New Mexico USA		