

Area dei Servizi Istituzionali Settore Servizi agli studenti e alla didattica Ufficio Dottorati di ricerca

ATTACHMENT 1

LAST REVISED 17/04/2018

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

PE10_4 Terrestrial ecology, land cover change PE10_5 Geology, tectonics, volcanology PE10_9 Biogeochemistry, biogeochemical cycles, environmental chemistry PE10_13 Soil science Lines of research covered by Ecology (theoretical and experimental; population, species and community level) Lines of research covered by ES8_5 EV0100000000000000000000000000000000000			IN BRIEF	
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(in alphabetical code order) 05/A PLANT BIOLOGY				
		05/A 05/B	ANIMAL BIOLOGY AND ANTHROPOLOGY	
05/C ECOLOGY				

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	05/G	
	05/I	
	07/B	
	07/C	AGRICULTURAL, FOREST AND BIOSYSTEMS ENGINEERING
	07/E	AGRICULTURAL CHEMISTRY, AGRICULTURAL GENETICS AND PEDOLOGY
	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
Scientific Disciplinary Sectors	BIO/02	SYSTEMATIC BOTANY
(in alphabetical code order)	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		
	LS	LIFE SCIENCES
Domain European Research Council	LS PE	LIFE SCIENCES PHYSICAL SCIENCES AND ENGINEERING
Council	PE	PHYSICAL SCIENCES AND ENGINEERING EVOLUTIONARY, POPULATION AND ENVIRONMENTAL BIOLOGY: EVOLUTION, ECOLOGY, ANIMAL BEHAVIOUR, POPULATION BIOLOGY, BIODIVERSITY, BIOGEOGRAPHY, MARINE BIOLOGY,
Council	PE LS8	PHYSICAL SCIENCES AND ENGINEERING EVOLUTIONARY, POPULATION AND ENVIRONMENTAL BIOLOGY: EVOLUTION, ECOLOGY, ANIMAL BEHAVIOUR, POPULATION BIOLOGY, BIODIVERSITY, BIOGEOGRAPHY, MARINE BIOLOGY, ECOTOXICOLOGY, PROKARYOTIC BIOLOGY APPLIED LIFE SCIENCES AND BIOTECHNOLOGY: AGRICULTURAL, ANIMAL, FISHERY, FORESTRY AND FOOD SCIENCES; BIOTECHNOLOGY, CHEMICAL BIOLOGY, GENETIC ENGINEERING, SYNTHETIC BIOLOGY, INDUSTRIAL BIOSCIENCES; ENVIRONMENTAL BIOTECHNOLOGY AND

	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/site/phdenvlifesci/home		
email	dottorato.ambientevita@units.it		

Course description and objectives	the ana env It in Ter cyc (the Bio Evc Env pop (LS (LS plai	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 autonoumously develop research activities in the field of environment. The course is focused on both theorethical and experimental activities. It includes the following ERC research areas: Terrestrial ecology, land cover change (PE10_4); Biogeochemistry, biogeochemical cycles, environmental chemistry (PE10_9); Soil science (PE10_13); Ecology (theoretical and experimental; population, species and community level) (LS8_1); Biodiversity, conservation biology, conservation genetics, invasion biology (LS8_4); Evolutionary biology: evolutionary ecology and genetics, co-evolution (LS8_5); Environmental and marine biology (LS8_8); Environmental toxicology at the population and ecosystems level (LS8_9); Microbial ecology and evolution (LS8_10); Agriculture related to animal husbandry, dairying, livestock raising (LS9_3); Agriculture related to crop production, soil biology and cultivation, applied plant biology (LS9_5); Population biology, population dynamics, population genetics (LS8_2); Genetics, Genomics, Bioinformatics and Systems Biology (LS2).	
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.		
<i>Main cooperating international Universities and Research Institutions</i>	1	Hopkins Marine Station, Stanford University, USA	
	2	Department of Environmental Sciences, Zhejiand University, China	
	3	Israel Oceanographic and Limnological Research (IOLR), Israel	
	4	Institute of Botany, University of Innsbruck, Austria	
	5	Los Alamos National Laboratory, New Mexico USA	