

Ph.D. Program in Ecology and Sustainable Management of Environmental Resources			
Coordinator	Prof.ssa ROBERTA CIMMARUTA		
Department	Department of Ecological and Biological Sciences (DEB)		
Partner Institutions	None		
Program duration	3 years: 1 st November 2020 – 31 th October 2023 PhD Thesis due date: 30 th September 2023		
Program objectives	<p>The aim of the course is to train young people in the field of basic and applied ecological research with particular regard to the sustainable use of natural resources, environmental management, eco-sustainable optimization of production processes (including the development of new green active compounds) and the mitigation of human impacts on biodiversity at all its organization levels. PhD students will acquire the skills needed to address the complex and multidisciplinary problems associated with both the research activity and the management and conservation of natural resources. From a training point of view, specific objectives are: i) to provide the skills needed to operate in highly multidisciplinary scientific research areas with a high degree of autonomy, from an original perspective and using rigorous methodological approach; (ii) to drive the development of communication skills in presenting research results and in drafting competitive scientific projects. According to these goals, compulsory didactic activities aimed at enhancing language proficiency, data analysis capabilities, and the ability to disseminate research results will be offered. The multidisciplinary nature of the research developed by the members of the College of Teachers matches with the width of the course, including many different disciplines and so ranging from green chemistry to forestry, from molecular genetics to the study of the role of eco-evolutionary processes in determining the structure and variations of space-temporal patterns of biodiversity also in relation to global change.</p>		
No. of positions	Total positions	11	
	Positions with scholarships	9	
	Positions without scholarships	2	
Scholarships	<p>N. 1 scholarship co-funded by DEB with Aspromonte National Park and UNITUS concerning the topic “Microgeographic structure of biodiversity, climate changes and nature conservation”</p> <p>N. 1 scholarship co-funded by DEB and UNITUS concerning the topic “Green chemistry in bio-nanotechnologies”</p> <p>N. 1 scholarship co-funded by DEB and UNITUS concerning the topic “Evolution and adaptation in extreme environments”</p> <p>N. 1 scholarship co-funded by DEB and UNITUS concerning the topic “Adaptation and survival in extreme terrestrial and extra-terrestrial simulated environments”</p> <p>N. 2 scholarships co-funded by DEB with Anton Dohrn Zoological Station and UNITUS concerning the topic “Marine habitat and species conservation through innovative restocking actions”</p>		

	<p>N. 1 scholarship co-funded by DAFNE and UNITUS concerning the topic “Monitoring forest habitats through remote sensing”</p> <p>N. 1 scholarship co-funded by DAFNE and UNITUS concerning the topic “New silvicultural models to control erosion process and hydrogeological instability”</p> <p>N. 1 scholarship funded by IRSA-CNR concerning the topic “Microbial ecology applied to contaminated ecosystems rescue”</p>
Positions without scholarships	<p>N.1 position concerning the topic “Developlenti of new bio-informatic methods for population transcriptomic analysis in non-model organisms”</p> <p>N. 1 position concerning the topic “Ecology and Sustainable Management of Environmental Resources”</p>
Admission requirements	<p>Application to the public competition is open to all who, by the date this call expires, possess one of the qualifications listed hereunder, regardless of age and citizenship :</p> <ul style="list-style-type: none"> - an Italian “laurea specialistica” obtained according to the Ministerial Decree n. 509/1999; - an Italian “laurea magistrale” obtained according to the Ministerial Decree n. 270/2004; - and Italian equivalent university degree obtained under Italian regulations previously in force and whose length is no less than 4 years; - a foreign degree equivalent to those mentioned above. <p>Admission is also open to those who will finish their degree by October 31st. In such cases admission will be “conditional”; the applicants will send by mail (dottorati@unitus.it) or hand out to the “<i>Ufficio Offerta Formativa</i>” a self-certification of the relative degree (a certification in case of Non-EU students). Self-certification (or certification in case of Non-EU students) should state the name of the awarding University, award date, grade and type of qualification (“vecchio ordinamento”, “Specialistica”/“magistrale”) and a copy of a valid identity document. Applicants not possessing the admission requirements yet, must indicate the expected date of graduation/qualification.</p>
Evaluation of candidates (maximum score: 80/80 points)	<p>Evaluation of academic qualification, oral entrance examination, English Language Knowledge</p> <p>The evaluation of candidates will be based on:</p> <ul style="list-style-type: none"> - an evaluation of academic ranking that will precede the and exam; - an oral examination including English knowledge. <p>The results of the evaluation of academic ranking will be published on the Tuscia University web site (www.unitus.it) at the section “<i>Didattica</i>” (then see under “<i>Dottorati di Ricerca</i>”). The score obtained will be added to the score of the oral examination to give the final total. The results will be published on the Tuscia University web site at the section “<i>Didattica</i>” (“<i>Dottorati di Ricerca</i>”).</p>

	<p>Together with the application form, candidates should present a research project concerning one of the topics of the Ph.D., with a maximum length of 3 pages, written in Italian or in English. The research project will be discussed during the oral exam.</p> <p>All the (non UK) applicants will undertake an English exam.</p>
<p>Evaluation of academic qualification (maximum score: 20/80 points)</p>	<ul style="list-style-type: none"> - Academic career (Certificate with the list of marks obtained during the academic career and final graduation): max score: 6 points - Scientific publications related to the topics of Ph.D.: max score 6 points - Participation in research projects: max score: 4 points - Professional experiences and other qualifications considered useful: max score 4 points
<p>Evaluation of oral examination (maximum score: 60/80 points)</p>	<p>Oral exam: maximum score 60/80 points</p> <p>Minimum score required to pass the oral interview 42/80 points</p> <p>Language for the examinations: Italian (Italian candidates, with a further English exam) or English (foreign candidates)</p>
<p>Examination topics</p>	<p>The oral exam will be aimed at verifying the candidate's aptitude for the scientific research, besides his/her knowledge in the main fields of PhD course. The oral exam will include: 1) the discussion of the research project; 2) questions on the PhD course topics; 3) English examination.</p> <p>PhD topics are the following:</p> <ul style="list-style-type: none"> - Basic Ecology - Marine Ecology - Community Ecology - Molecular Ecology and Phylogeny - Ecology and Adaptation in Extreme Environments - Ecology of Microorganisms - Bioindicators - Management and conservation of exploited and endangered species - Sustainable management of marine and coastal environment - Environmental Hygiene - Parasitology - Ecotoxicology - Mutagenesis and Carcinogenesis - Forestry ecology - Green chemistry - Methods and innovation in green chemistry - Conservation of nature and biodiversity - Environmental Risk
<p>Exam dates</p>	<p>The exams will be held between 9th – 23rd September 2020. The timetable for the exams will be published in the section "Didactics"> "Doctoral Studies" of the University's website (www.unitus.it) within the deadline of the call for application.</p>

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