ANNEX.1A		
UNIVERSITA' DEGLI STUDI DEL MOLISE		
Area Innovazione e Sviluppo		
<b>Dottorato in BIOSCIENZE E TERRITORIO (DOT1339138)</b>		
PhD IN BIOSCIENCES AND TERRITORY		
	Coordinator: prof. Gabriella Stefania SCIPPA	
Length of course	1st November 2017 – 31st October 2020	
Educational targets	<ul> <li>The PhD Course in Biosciences and Territory aims to develop advanced scientific and technological abilities required to carry out highly qualified autonomous research activities, even with an interdisciplinary approach, to apply to the fields of environmental biology, territory planning, management and monitoring, computer science and mathematics.</li> <li>Curricula: <ol> <li>Environmental Biology: aims to develop highly qualified researchers with multidisciplinary skills, able to plan and carry out autonomously basic and applied research concerning the physical, chemical and biological interactions of the various biotic and abiotic environmental components.</li> </ol> </li> <li>Computer science-Mathematics: aims to provide wide-ranging and in depth know-how on computer science and mathematics, with particular emphasis to a) software engineering.</li> </ul>	
	<ul> <li>particular emphasis to a) software engineering, software system security and computer law, computer forensics, biometric systems, images processing, and b) optimization, decision theory, numerical analysis.</li> <li>3. Territory: intends to prepare researchers qualified to use innovative integrated approaches to deal with different issues related to environmental safeguard and conservation, social and economical development, risk evaluation, and planning of system defenses against natural and anthropogenic hazards.</li> </ul>	
Admission requirements	- A University degree obtained after 2-year specialization courses	
	<ul> <li>A University degree (old university legislation)</li> <li>Foreign academic qualification already declared equipollent by competent Italian authorities or deemed equivalent for the sole purposes of the competition.</li> </ul>	
Total available positions	1 otal available positions 8:	
	- 6 positions with scholarship	
	- 2 positions without scholarship	
	Curriculum Territory	
	<b>3</b> positions with scholarships, one of which reserved to students graduated in a foreign University and <b>1</b> position without scholarship	
	Curriculum Environmental Biology	
	2 positions with scholarships 1 position without scholarship	
	Curriculum Computer science-Mathematics	
	1 position with scholarship	
1		

Exams - Modalities of admission	Italian candidates         • Evaluation of qualifications and project proposal annexed to the application         •Interview in Italian or English language         •Language: compulsory knowledge of English language         Italian candidates residing abroad         • Evaluation of qualifications and project proposal annexed to the application         • Evaluation of qualifications and project proposal annexed to the application
	<ul> <li>A Skype contact is compulsory</li> <li>Foreign candidates <ul> <li>Evaluation of qualifications and project proposal annexed to the application</li> </ul> </li> </ul>
	<ul> <li>Interview in English language</li> <li>Language: compulsory knowledge of English language</li> <li>Foreign candidates residing abroad</li> </ul>
	<ul> <li>Evaluation of qualifications and research project proposal annexed to the application</li> <li>Possible interview in videoconference.</li> <li>A Skype contact is compulsory</li> </ul>
Interview	<b><u>Place</u></b> : Università degli Studi del Molise, Dipartimento di Bioscienze e Territorio, Pesche (IS) <u><b>Date</b></u> : starting from 16 <sup>th</sup> October 2017 at 10.00 according to the agenda established by the commission based on the number of the admitted to the interview.
Other assessable qualifications	<ul> <li>Qualifications evaluated up to 20/80 points:</li> <li>Final degree mark;</li> <li>Scientific publications on peer-reviewed journals (max. 3), participation to national and international congresses with oral presentations and posters;</li> <li>Other qualifications considered evaluable (study grants, awards, courses attended, Masters, Erasmus or study programs abroad, work experiences, etc)</li> </ul>
Criteria for evaluating the exams	Evaluation of qualifications is preparatory in order to be admitted to the tests. All candidates having scored at least 15/80 and 15/80 for the project proposal annexed to the application will be considered suitable for the interview.
	Scored at most 20/80 for the titles scored at most 60/80 for the project presentation: 20/80 for the research project proposal annexed to the application form 40/80 for the oral presentation and discussion of the research project proposal annexed to the application form
Examination themes	Application forms should be accompanied with a research project proposal completed with date and signature. The proposal will be discussed during the interview.
	It is compulsory to send the research project with the application.

The research project <b>must have a maximum</b> length of <b>10.000 characters</b>
(excluding references). The project proposal must be <b>on one</b> of the following
themes:
1.Curriculum - Territory:
A) Territorialization processes and place-based social capital building
driven by foreign migrants settlement
b) innovative and integrated approaches to fandscape and environmental planning
C) Evolution of governance and socio-economic development of rural
and inner areas
and miler areas
Scholarship reserved to students graduated in foreign Universities
Distribution and niche modelling to forecast climate change impacts on
wildlife of the Himalaya.
2 Curriculum – Environmental Biology:
2. Curriculum – Environmental Diology.
D) Use of microorganisms for environmental recovery
E) Multidisciplinary analysis of the interactions between plants and
biotic and/or abiotic environmental components
F) Characterization and conservation of autochthon germpalsm of
spontaneous and cultivated plant species for agricultural and/or
environmental purposes
G) Use of plants for environmental "green technologies"
H) Chemical and physical analysis of plant secondary metabolites and
their relationships with the environment.
I) Environmental effects on the integrity of Ghrelin/GHS-R system at
eye level.
J) Analysis and characterization of microbial communities in various
nabitats, in interdisciplinary scientific contexts.
3. Curriculum - Computer science-Mathematics:
A) Automated software engineering
B) Software quality and evolution
C) Recommendation systems based on data mining and/or natural
language processing techniques
D) Data-fusion methods for multimodal physical and behavioral
biometrics
E) Strategic use of ICT in teaching and learning
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For the oral presentation and discussion of the project candidates could use
information technology supports.