ANNEX 1/a

International PhD program in: APPLIED BIOLOGY AND ENVIRONMENTAL SAFEGUARD

XXXV CYCLE – a.y. 2019-2020

<table>
<tr><td>Department</td><td colspan="3">Department of Sciences - Potenza</td></tr>
<tr><td>Coordinator</td><td colspan="3">Prof. Sabino Aurelio BUFO
e-mail: sabino.bufo@unibas.it</td></tr>
<tr><td>Duration</td><td colspan="3">3 years</td></tr>
<tr><td>Web site</td><td colspan="3">http://www.phd-science.eu/index.php/en/</td></tr>
<tr><td>Curricula</td><td colspan="3">1. Geo-Systems, Geo-Resources and Environmental Safeguard
2. Applied Biology</td></tr>
<tr><td>Aims and topics</td><td colspan="3">The PhD program in "Applied Biology and Environmental Safeguard" is at its fifth edition having been established by the XXX cycle. It represents the evolution of experiences that in the past have involved teachers and researchers in the scientific community of the University of Basilicata, and affiliated to foreign universities. The PhD program fits into the interdisciplinary field of biological and natural sciences at the crossroads of several fields of study that have a common language and scientific methods. It aims to provide students with the tools for applied research in animal biology, plant, microbial and environmental fields, as well as for research in the areas of environmental monitoring, conservation, environmental protection, and utilization of natural resources, paving the way to research programs on "Geo-Systems and Geo-resources", and implementing new Green and White Technologies in the utilization of natural resources.
The PhD program in "Applied Biology and Environmental Safeguard", therefore, combines the skills acquired in the biological fields with those of the "Earth Sciences", both in the Department of Sciences. This PhD program has been created to address research areas that have strong application outcomes, giving priority to technological innovation without neglecting basic research.</td></tr>
<tr><td>Admission requirements</td><td colspan="3">a) University degree obtained under the previous educational systems (ex ante D.M. 509/99, whose legal course has at least a four-year term);
b) Laurea specialistica/magistrale (D.M. 509/99 and Dm 270/2004);
c) Academic title obtained abroad and eligible for access to the PhD programme, previously recognized by academic authorities, even in the context of inter-university cooperation and mobility agreements. In the absence of such approval, the candidate must apply a request in the application form according to the Art. 3 of this call.</td></tr>
<tr><td rowspan="2">Available positions</td><td rowspan="2">10</td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>9
including 1 scholarship reserved to graduates in foreign universities and 4 scholarships reserved to graduates employed in agreed companies</td><td>1</td></tr>
<tr><td>Type of scholarships
(Description awarding entity and research topic)</td><td>Scholarships funded by Regione Basilicata
"Convenzione Dottorati Innovativi con specializzazione in tecnologie abilitanti in Industria 4.0"</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Applied Biology in the mandatory topic "Formulation and characterization of bioactive plant extracts to be inserted in functionalizing microcapsules"

<u>1 scholarship</u> to the Curriculum Applied Biology in the mandatory topic "Innovative processes for lipid extraction from bioconverter insects, qualitative and quantitative evaluation and industrial applications for the formulation of personal care products"

<u>1 scholarship</u> to the Curriculum Geo-Systems, Geo-Resources and Environmental Safeguard in the mandatory topic "Study of metallic artefacts of Mediterranean marine origin: raw materials, production, degradation"

A period abroad from a minimum of 3 months to a maximum of 6 months and a period in the company site from a minimum of 6 months to a maximum of 12 months are both mandatory for this kind of scholarships.</td></tr>
</table>

	Scholarships founded by MIUR	**<u>1 scholarship</u>** to the Curriculum **Geo-Systems, Geo-Resources and Environmental Safeguard** in one of the following topics (the winning candidate will choose his theme from those listed here) - Fault network evolution in the axial portion of the southern Apennines fold-and-thrust belt. - Relationships between crustal deformations and fluid geochemistry in seismically active areas of the Southern Apennines: Application of new technologies for geochemical monitoring. - Modeling tidal dynamics based on the stratigraphic and sedimentological analysis of modern and ancient marine straits and seaways. - Searching for ancient tidal straits in the subsurface: integrated well-core and seismic analysis of selected offshore areas. - Fault permeability in carbonate rocks. **<u>1 scholarship</u>** to the Curriculum **Applied Biology** in one of the following topics (the winning candidate will choose his theme from those listed here) - Breeding of bioconverter insects for the production of high value raw materials to be used in animal feed. - Development of new molecules for the treatment of chronic renal diseases. - Preparation of medical devices with controlled release using natural substances of plant origin. - New molecules and pharmacological targets in vascular diseases. - Design and production of biopolymeric electrospun scaffolds for innovative applications. A period abroad from a minimum of 6 months to a maximum of 18 months is mandatory for this kind of scholarships. **One of these 2 scholarships is reserved to graduates in foreign universities.**
	Scholarships reserved to graduates employed in agreed companies	**<u>1 scholarship</u>** to the Curriculum **Applied Biology** in the mandatory topic "Development and optimization of systems suitable for the production of bioenzymes starting from unicellular plants and / or from microorganisms" **Reserved to KAMABIO s.r.l.** **<u>1 scholarship</u>** to the Curriculum **Applied Biology** in the mandatory topic "Development and optimization of the production of liposomes as a vehicle of bioactive molecules obtained also from unicellular plants" **Reserved to ALMACABIO s.r.l.** **<u>1 scholarship</u>** to the Curriculum **Applied Biology** in the mandatory topic "Definition and optimization of a process for the production of bioenergy starting from unicellular plants" **Reserved to THEMA Informatik s.r.l.** **<u>1 scholarship</u>** to the Curriculum **Applied Biology** in the mandatory topic "Definition of an advanced biotechnological process for the production of low environmental impact containers as potential alternative to plastics" **Reserved to ALMAGISI s.r.l.**

<table>
<tr><td rowspan="2">Positions reserved for graduates in foreign universities</td><td rowspan="2"></td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>1</td><td>0</td></tr>
<tr><td>Positions without scholarship</td><td></td><td colspan="2"><u>1 position</u> to the Curriculum Applied Biology or Geo-Systems, Geo-Resources and Environmental Safeguard with a free theme.</td></tr>
<tr><td>Admission procedure</td><td colspan="3">The admission procedure is conducted through the:
a) evaluation of qualifications
b) evaluation of a research project due to the pilot issue of the chosen curriculum, which will be evaluated together with the titles
c) interview
For applicants residing abroad, the admission procedure is conducted through the:
a) evaluation of qualifications
b) interview</td></tr>
<tr><td>Evaluation criteria for applicants residing in Italy</td><td colspan="3">a) evaluation of qualifications: up to a maximum of 60 points
They will be allowed to interview candidates who have achieved a rating of not less than 36 points
b) interview: up to a maximum of 40 points
The interview will be considered passed if the candidates will be given an overall rating of no less than 24 points

Minimum total score: 60 out of 100.</td></tr>
<tr><td>Evaluation criteria for applicants residing abroad</td><td colspan="3">a) evaluation of qualifications: up to a maximum of 30 points
They will be allowed to interview candidates who have achieved a rating of not less than 18 points
b) interview: up to a maximum of 40 points
The interview will be considered passed if the candidates will be given an overall rating of no less than 24 points

Minimum total score: 42 out of 70.</td></tr>
<tr><td>Interview by teleconferencing for candidates residing abroad (please see art. 5 of the Call- Annex D)</td><td colspan="3">Yes</td></tr>
<tr><td rowspan="6">Assessable qualifications</td><td colspan="2">Graduation Thesis
(The candidate must also submit a summary in Italian or English of the thesis of max 16.000 characters)</td><td>Up to 5 points</td></tr>
<tr><td colspan="2">Degree mark</td><td>Up to 10 points</td></tr>
<tr><td colspan="2">Research project (if due)
(It must be written in English using the template in Annex C, and should be related to a theme issued in the chosen Curriculum; the project will be assessed in relation to:
degree of innovation compared to the state of art;
clarity of scientific interests and motivations;
degree of knowledge of the research theme;
degree of sustainability of the proposal, considering the duration of doctoral studies.
Maximum length: 16.000 characters)</td><td>Up to 30 points</td></tr>
<tr><td colspan="2">Scientific publications
(Articles in national and international scientific journals , proceedings of scientific conferences, books or book chapters)</td><td>Up to 5 points</td></tr>
<tr><td colspan="2">Other titles
(University degrees or Master Specialization, Research Grants, Scholarships, Erasmus scholarships and periods of activity abroad)</td><td>Up to 10 points</td></tr>
</table>

Interview program	Will be held in English and evaluated taking into account the ability to deal in organic form the proposed issues, particularly with respect to clarity, the ability to synthesize, to the mastery of terminology and the level of detail and knowledge of the English language. During the interview the knowledge of the Italian language will be assessed.
Foreign language	**English** (knowledge of a foreign language will be assessed during the interview)
Schedule of the admission tests	**Evaluation of qualifications: results will be available from <u>September 12, 2019</u>** on the website http://portale.unibas.it/site/home/didattica/dottorati-di-ricerca.html **Day of the interview: <u>September 16, 2019 - 10:00 a.m.</u>** Meeting room - Department of Sciences – Campus di Macchia Romana, 85100 Potenza

ANNEX 1/b

PhD program in: CITIES AND LANDSCAPES: ARCHITECTURE, ARCHAEOLOGY, CULTURAL HERITAGE, HISTORY AND RESOURCES

XXXV CYCLE – a.y. 2019-2020

<table>
<tr><td>Department</td><td colspan="3">Department of the European and Mediterranean Cultures: Architecture, Environment, Cultural Heritages (DICEM) - Matera</td></tr>
<tr><td>Coordinator</td><td colspan="3">Prof. Mauro FIORENTINO
e-mail: mauro.fiorentino@unibas.it</td></tr>
<tr><td>Duration</td><td colspan="3">3 years</td></tr>
<tr><td>Web site</td><td colspan="3">http://dicem.unibas.it/site/home/ricerca/dottorati-di-ricerca.html</td></tr>
<tr><td>Curricula</td><td colspan="3">Not provided</td></tr>
<tr><td>Aims and topics</td><td colspan="3">The primary objective is the acquisition of an appropriate knowledge and of the effective theoretical and methodological tools that allow to operate with specific skills and disciplinary specializations and with a real multi - and interdisciplinary capability, in an aware dialogue between humanistic and technical-scientific knowledge for the study, the analysis and the interpretation of the phenomenon of cities and landscapes, with the use of innovative technologies and the design of interventions aimed at their sustainable development:
Analysis, interpretation, diagnostics, protection, recovery, enhancement and enjoyment of the architectural, environmental, heritage, historical, cultural, artistic and archaeological assets and of the tangible and intangible heritages and related administrative functions.
Stratigraphic analysis of urban and rural contexts according to the methods of the total history and the global archeology of the landscapes .
Study of natural, energy, water resources and effects of climate change, environmental quality and adaptation strategies for natural, rural and urban systems.
Analysis of the evolutionary processes and the organizational models of the environment to small and large spatial and temporal scale, and projects for urban and landscape regeneration.
Process analysis of land instability, natural hazards, environmental and soil protection, and planning of urban, rural and coastal landscapes.
Analysis of rural and urban greening space, conservation of plant species in the natural environment and in the city.
Use of innovative technologies.</td></tr>
<tr><td>Admission requirements</td><td colspan="3">a) University degree obtained under the previous educational systems (ex ante D.M. 509/99, whose legal course has at least a four-year term);
b) Laurea specialistica/magistrale (D.M. 509/99 and D.M. 270/2004);
c) Academic title obtained abroad and eligible for access to the PhD program, previously recognized by academic authorities, even in the context of inter-university cooperation and mobility agreements. In the absence of such approval, the candidate must apply a request in the application form according to the Art. 3 of this call.</td></tr>
<tr><td rowspan="2">Available positions</td><td rowspan="2">9</td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>7
including 1 scholarship reserved to graduates in foreign universities and 1 scholarship reserved to graduates employed in agreed companies</td><td>2</td></tr>
</table>

<table>
<tr><td rowspan="4">Type of scholarships
(Description awarding entity and research topic)</td><td>Scholarships funded by MIUR</td><td colspan="2">1</td></tr>
<tr><td>Scholarships funded by Regione Basilicata "Convenzione Dottorati Innovativi con specializzazione in tecnologie abilitanti in Industria 4.0"</td><td colspan="2"><u>1 scholarship</u> in the mandatory topic "Digital cities and landscapes"

<u>1 scholarship</u> in the mandatory topic "Integration systems for architectural retrofitting of existing buildings aimed at the redevelopment of urban areas"

<u>1 scholarship</u> in the mandatory topic "IMAGINING EUROPE. Visions from a migrant perspective"

All an abroad stage (min 3 max 6 months) and a stage at a national company (min 6 max 12 months) are mandatory for the three fellowships.</td></tr>
<tr><td>Scholarships funded by CNR-IMAA/Openet Technologies S.p.A.</td><td colspan="2"><u>1 scholarship</u> in the mandatory topic "Improving the future saving the past"</td></tr>
<tr><td>Scholarships funded by MIBAC (Matera)</td><td colspan="2"><u>1 scholarship</u> reserved to MIBAC</td></tr>
<tr><td rowspan="2">Positions reserved for graduates in foreign universities</td><td rowspan="2"></td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>1</td><td>0</td></tr>
<tr><td>Positions without scholarship</td><td colspan="3">2</td></tr>
<tr><td>Admission procedure</td><td colspan="3">The admission procedure is conducted through the:
a) evaluation of qualifications
b) evaluation of a research project due to the pilot issue "KNOWLEDGE, ARTS AND TECHNOLOGIES FOR THE PROTECTION AND DEVELOPMENT OF ASSETS AND IDENTITARY LANDSCAPES", which will be evaluated together with the titles
c) interview</td></tr>
<tr><td>Evaluation criteria</td><td colspan="3">a) evaluation of qualifications: up to a maximum of 60 points
They will be allowed to interview candidates who have achieved a rating of not less than 36 points
b) interview: up to a maximum of 40 points
The interview will be considered passed if the candidates will be given an overall rating of not less than 24 points

Minimum total score: 60 out of 100.</td></tr>
<tr><td>Interview by teleconferencing for candidates residing abroad (please see art. 5 of the Call- Annex D)</td><td colspan="3">Yes</td></tr>
</table>

Assessable qualifications	**Graduation Thesis** (the candidate must also submit a summary in Italian or English of the thesis of max 16.000 characters)	Up to **5** points
	Degree mark	Up to **10** points
	Research project (It must be written in English or Italian, due to the pilot issue of the chosen curriculum, using the specimen in Annex C, and will be assessed in relation to: degree of innovation compared to the state; clarity of scientific interests and motivations; the subject of research knowledge; degree of sustainability of the proposal, considering the doctoral period. Maximum length: 16.000 characters)	Up to **30** points
	Scientific publications (Articles in national and international scientific journals , proceedings of scientific conferences, books or book chapters)	Up to **5** points
	Other titles (University degrees or Master Specialization, Research Grants, Scholarships, Erasmus scholarships and periods of activity abroad, …)	Up to **10** points
Interview program	It can be taken in Italian or English, and will focus on the discussion of the research project presented. During the interview the knowledge of the Italian language will be assessed.	
Foreign language	**English** (knowledge of a foreign language will be assessed during the interview)	
Schedule of the admission tests	**Evaluation of qualifications: results will be available from <u>September 16, 2019</u>** on the website http://portale.unibas.it/site/home/didattica/dottorati-di-ricerca.html **Day of the interview: <u>September 19, 2019 - 9:30 a.m.</u>** Meeting room - Department of the European and Mediterranean Cultures: Architecture, Environment, Cultural Heritages (DICEM) - Via Lanera, 20, 75100 Matera	

ANNEX 1/c

PhD program in: ENGINEERING FOR INNOVATION AND SUSTAINABLE DEVELOPMENT

XXXV CYCLE – a.y. 2019-2020

Department	**Engineering School (SI-UniBas) - Potenza**
Coordinator	Prof. Carmine SERIO e-mail: carmine.serio@unibas.it
Duration	3 years
Web site	http://ingegneria.unibas.it/site/home/offerta-formativa/dottorati-di-ricerca/articolo64.html
Curricula	**1. Methods and Technologies for Environmental Monitoring and Protection** **2. Analysis and prevention of natural risks** **3. Industrial Engineering and Information Technologies**
Aims and topics	The development, implementation and adoption of models of sustainable development requires the convergence of innovative methodologies and technologies covered by different disciplines. Therefore, the main objective of the PhD program is to train researchers of high scientific qualification, capable of contributing to the creation and implementation of innovative development models, efficient, socially sustainable and aimed at the protection of the environment. Future PhDs will be characterized by the ability to integrate specialized expertise with general methodologies and transversal knowledge as well as methodological rigor and sensitivity to application developments. Specialist skills will be acquired in one of the following areas: methods and technologies for monitoring and protecting the environment, methods of analysis, prevention and reduction of natural hazards, management of raw materials, energy systems and industrial production, methods and systems for the treatment and transmission of information. Future graduates will also acquire soft skills in the field of sensors, the satellite platform of tools, modeling and analysis of complex interacting systems and technologies in the public. **Topics of the curriculum "Methods and Technologies for Environmental Monitoring and Protection":** • Sensors and sensing technologies of environmental parameters • Integration and analysis of environmental data • Modelling monitoring, protection and preservation of the environment • Development of strategies and actions for prevention and resolution of environmental problems • Energy saving and distributed micro-generation • Data processing and applications with particular reference to COPERNICUS for environmental monitoring **Topics of the curriculum "Analysis and prevention of natural risks":** • Numerical and experimental approaches for the assessment of seismic vulnerability of structures • Methods and techniques for the mitigation and management of seismic risk • Theoretical and experimental analyses of geotechnical problems • Slope stability and landslide risk reduction • Non-linear analysis of structures • Data processing and applications with particular reference to COPERNICUS for environmental monitoring **Topics of the curriculum "Industrial Engineering and Information Technologies":** • Mechanical engineering design and applied mechanics • Mechanical technologies and industrial plants • Energy conversion systems, Engineering Thermodynamics and fluid flow machinery • Electromagnetism • Devices and systems for telecommunications • Automation and Mechatronics • Applied Physics

<table>
<tr><td>Admission requirements</td><td colspan="3">a) University degree obtained under the previous educational systems (ex ante D.M. 509/99, whose legal course has at least a four-year term);
b) Laurea specialistica/magistrale (D.M. 509/99 and Dm 270/2004);
c) Academic title obtained abroad and eligible for access to the PhD program, previously recognized by academic authorities, even in the context of inter-university cooperation and mobility agreements. In the absence of such approval, the candidate must apply a request in the application form according to the Art. 3 of this call.</td></tr>
<tr><td rowspan="2">Available positions</td><td rowspan="2">16</td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>14</td><td>2</td></tr>
<tr><td rowspan="3">Type of scholarships
(Description awarding entity and research topic)</td><td>Scholarships funded by MIUR</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection

<u>1 scholarship</u> to the Curriculum Analysis and prevention of natural risks</td></tr>
<tr><td>Scholarships funded by Engineering School</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Industrial Engineering and Information Technologies</td></tr>
<tr><td>Scholarships funded by Regione Basilicata "Convenzione Dottorati Innovativi con specializzazione in tecnologie abilitanti in Industria 4.0"</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection about the pre-assigned topic "Innovative and environmentally friendly building materials"

<u>1 scholarship</u> to Curriculum Analysis and prevention of natural risks about the given topic "Influence of the in-plane and out-of-plane behavior of masonry infills on the seismic performance of reinforced concrete frame buildings"

<u>1 scholarship</u> to the Curriculum Industrial Engineering and Information Technologies about the given topic "Additive manufacturing technologies of medium to large size components through robotic systems"

<u>1 scholarship</u> to the Curriculum Industrial Engineering and Information Technologies about the given topic "Advanced CFD models to investigate propulsion systems"

<u>1 scholarship</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection about the pre-assigned topic "Technologies for the recovery and valorization of organic by-products in the bioenergetics supply chain"

Scholarships require a stage abroad from 3 to 6 months and a company internship from 6 to 12 months.</td></tr>
</table>

<table>
<tr><td rowspan="4"></td><td>Scholarships funded by ENI</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection about the pre-assigned topic "Innovative technologies and nanomaterials in the hydrocarbon production and processing cycle"

<u>1 scholarship</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection about the pre-assigned topic "Advanced treatments for controlling nbsp: micropollutants in wastewater treatment"

<u>1 scholarship</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection about the pre-assigned topic "Optimal management of coastal groundwater resources focusing on salinization and subsidence risks"</td></tr>
<tr><td>Scholarships funded by CNR – Pintotecno s.r.l.</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection about the pre-assigned topic "Innovative technologies for the quality of environments in production systems"</td></tr>
<tr><td>Scholarships funded by CNR – IMAA</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection about the pre-assigned topic "Integration of electromagnetic methods and technologies (Ground-Based SAR and Electrical Resistivity Tomography) for environmental monitoring"</td></tr>
<tr><td>Scholarships funded by IGEAM environment health & safety solutions</td><td colspan="2"><u>1 scholarship</u> reserved to IGEAM</td></tr>
<tr><td>Positions reserved for graduates in foreign universities</td><td></td><td>With scholarship
1</td><td>Without scholarship
0</td></tr>
<tr><td>Positions without scholarship</td><td></td><td colspan="2"><u>2 positions</u> to the Curriculum Methods and Technologies for Environmental Monitoring and Protection</td></tr>
<tr><td>Admission procedure</td><td colspan="3">The admission procedure is conducted through the:
a) evaluation of qualifications
b) evaluation of a research project due to the pilot issue of the chosen curriculum, which will be evaluated together with the titles
c) interview</td></tr>
<tr><td>Evaluation criteria</td><td colspan="3">a) evaluation of qualifications: up to a maximum of 40 points
They will be allowed to interview candidates who have achieved a rating of not less than 24 points
b) interview: up to a maximum of 60 points
The interview will be considered passed if the candidates will be given an overall rating of not less than 36 points

Minimum total score: 60 out of 100.</td></tr>
<tr><td>Interview by teleconferencing for candidates residing abroad (please see art. 5 of the Call- Annex D)</td><td colspan="3">Yes</td></tr>
</table>

Assessable qualifications	**Graduation Thesis** (the candidate must also submit a summary in Italian or English of the thesis of max 16.000 characters)	Up to **5** points
	Degree mark	Up to **20** points
	Research project (It must be written in English or Italian, due to the pilot issue of the chosen curriculum, using the specimen in Annex C, and will be assessed in relation to: degree of innovation compared to the state; clarity of scientific interests and motivations; the subject of research knowledge; degree of sustainability of the proposal, considering the doctoral period. Maximum length: 16.000 characters)	Up to **5** points
	Scientific publications (Articles in national and international scientific journals , proceedings of scientific conferences, books or book chapters)	Up to **5** points
	Other titles (University degrees or Master Specialization, Research Grants, Scholarships, Erasmus scholarships and periods of activity abroad, …)	Up to **5** points
Interview program	It can be taken in Italian or English, and will focus, for each curriculum, on relative issues. During the interview the knowledge of the Italian language will be assessed.	
Foreign language	**English** (knowledge of a foreign language will be assessed during the interview)	
Schedule of the admission tests	**Evaluation of qualifications: results will be available from <u>September 10, 2019</u>** on the website http://portale.unibas.it/site/home/didattica/dottorati-di-ricerca.html **Day of the interview: <u>September 13, 2019 - 9:00 a.m.</u>** Classroom Amatucci – Engineering School – Campus di Macchia Romana, 85100 Potenza	

ANNEX 1/d

PhD program in: AGRICULTURAL, FOREST AND FOOD SCIENCES

XXXV CYCLE – a.y. 2019-2020

<table>
<tr><td>Department</td><td colspan="3">School of Agriculture, Forest, Food and Environmental Sciences (SAFE) - Potenza</td></tr>
<tr><td>Coordinator</td><td colspan="3">Prof. Fabio NAPOLITANO
e-mail: safe.didattica@unibas.it</td></tr>
<tr><td>Duration</td><td colspan="3">3 years</td></tr>
<tr><td>Web site</td><td colspan="3">http://www2.unibas.it/dottoratostafa/wordpress/</td></tr>
<tr><td>Curricula</td><td colspan="3">1. Agricultural, Forest and Environmental Science
2. Food Sciences and Engineering</td></tr>
<tr><td>Aims and topics</td><td colspan="3">The objective is to provide a sound knowledge and know-how (with special reference to: scientific method and procedures, research project organization and ideation, results presentation, evaluation of scientific and technological novelty) in order to build a professional able to conduct research, research management transfer and high-profile extension.
In particular, the preparation will be addressed to the following learning objectives:
a) acquisition of innovative knowledge in the field of plant science, animal, environmental, land, forest and food technology;
b) autonomy in the design and conduct of original and innovative research projects, ability to publish the results in the most qualified in the industry journals, to communicate them in national and international scientific conferences, as well as audiences of technicians and administrators;
c) ability to manage resources and staff in research both basic and applied, in universities, research institutions, government agencies, enterprises and national and international agencies;
d) ability to promote, in academic and professional contexts, technological advancement, social or cultural area based on scientific knowledge.</td></tr>
<tr><td>Admission requirements</td><td colspan="3">a) University degree obtained under the previous educational systems (ex ante D.M. 509/99, whose legal course has at least a four-year term);
b) Laurea specialistica/magistrale (D.M. 509/99 and Dm 270/2004);
c) Academic title obtained abroad and eligible for access to the PhD program, previously recognized by academic authorities, even in the context of inter-university cooperation and mobility agreements. In the absence of such approval, the candidate must apply a request in the application form according to the Art. 3 of this call.</td></tr>
<tr><td rowspan="2">Available positions</td><td rowspan="2">5</td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>5</td><td>0</td></tr>
<tr><td rowspan="2">Type of scholarships
(Description awarding entity and research topic)</td><td>Scholarships funded by MIUR</td><td colspan="2"><u>1 scholarship</u></td></tr>
<tr><td>Scholarships funded by Regione Basilicata
“Convenzione Dottorati Innovativi con specializzazione in tecnologie abilitanti in Industria 4.0”</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Agricultural, Forest and Environmental Science in the mandatory topic “Sustainable control of insect vectors of phytopathogenic viruses in the context of climate change: the role of radical symbionts"

<u>1 scholarship</u> to the Curriculum Agricultural, Forest and Environmental Science in the mandatory topic “Innovative use of hazelnuts in cheesmaking processes"</td></tr>
</table>

<table>
<tr><td></td><td></td><td colspan="2"><u>1 scholarship</u> to the Curriculum Food Sciences and Engineering in the mandatory topic "Optimization of the microbrewing technology for high quality gluten-free beers production".

A period abroad from a minimum of 3 months to a maximum of 6 months and a period in company from a minimum of 6 to a maximum of 12 months is mandatory for all scholarships.</td></tr>
<tr><td></td><td>Scholarship funded by ENI</td><td colspan="2"><u>1 scholarship</u> to the Curriculum Agricultural, Forest and Environmental Science in the mandatory topic "Influence of soil hydrological spatial variability on carbon assimilation under salinity conditions"</td></tr>
<tr><td rowspan="2">Positions reserved for graduates in foreign universities</td><td rowspan="2"></td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>0</td><td>0</td></tr>
<tr><td>Positions without scholarship</td><td></td><td colspan="2">0</td></tr>
<tr><td>Admission procedure</td><td colspan="3">The admission procedure is conducted through the:
a) evaluation of qualifications

b) interview</td></tr>
<tr><td>Evaluation criteria</td><td colspan="3">a) evaluation of qualifications: up to a maximum of 30 points
They will be allowed to the interview candidates who have achieved a rating of not less than 10 points
b) interview: up to a maximum of 70 points
The interview will be considered passed if the candidates will be given an overall rating of not less than 50 points

Minimum total score: 60 out of 100.</td></tr>
<tr><td>Interview by teleconferencing for candidates residing abroad (please see art. 5 of the Call- Annex D)</td><td colspan="3">Yes</td></tr>
<tr><td rowspan="4">Assessable qualifications</td><td colspan="2">Degree mark</td><td>Up to 10 points</td></tr>
<tr><td colspan="2">Scientific publications
(Articles in national and international scientific journals, proceedings of scientific conferences, books or book chapters)</td><td>Up to 10 points</td></tr>
<tr><td colspan="2">Research periods at universities and institutions</td><td>Up to 5 points</td></tr>
<tr><td colspan="2">Other titles
(University degrees or Master Specialization)</td><td>Up to 5 points</td></tr>
<tr><td>Interview program</td><td colspan="3">The candidate's capacity will be assessed on scientific issues, his design skills and his motivation. For the candidates who request it, the oral exam can be held electronically and in English language.
During the interview the knowledge of the Italian language will be assessed.</td></tr>
<tr><td>Foreign language</td><td colspan="3">English (knowledge of a foreign language will be assessed during the interview)</td></tr>
</table>

Schedule of the admission tests	**Evaluation of qualifications: results will be available from <u>September 13, 2019</u>** on the website http://portale.unibas.it/site/home/didattica/dottorati-di-ricerca.html **Day of the interview: <u>September 18, 2019 - 9:00 a.m.</u>** Classroom A20 – School of Agriculture, Forest, Food and Environmental Sciences (SAFE) - Campus di Macchia Romana, 85100 Potenza

ANNEX 1/e

PhD program in: HISTORY, CULTURE AND KNOWLEDGES OF MEDITERRANEAN EUROPE FROM ANTIQUITY TO CONTEMPORARY AGE

XXXV CYCLE – a.y. 2019-2020

<table>
<tr><td>Department</td><td colspan="3">Department of Human Sciences (DiSU) - Potenza</td></tr>
<tr><td>Coordinator</td><td colspan="3">Prof. Michele BANDINI
e-mail: michele.bandini@unibas.it</td></tr>
<tr><td>Duration</td><td colspan="3">3 years</td></tr>
<tr><td>Web site</td><td colspan="3">http://disu.unibas.it/site/home/offerta-formativa/dottorati-di-ricerca.html</td></tr>
<tr><td>Curricula</td><td colspan="3">1. Mediterranean civilizations, institutions and territory
2. Literatures, languages, cultures and knowledge in Mediterranean Europe</td></tr>
<tr><td>Aims and topics</td><td colspan="3">The PhD course aims at providing PhD students with the skills required to high quality research, as a result of a strong integration between "knowledge" and "know-how". The planned three-year course focuses on a plurality of themes, from the theoretical debate to the history of mentalities and thought, literary history, social-economic as well as political-institutional history. The course will enable PhD students to conduct original research at a high scientific level, with a special concern for the analysis of the relations between Southern Italy and other countries and/or areas of European countries in the Mediterranean basin. The interest for the historical dynamics will be accompanied by a special focus on the artistic, linguistic, literary, philosophical, and generally cultural experience. Within both curricula, the PhD student will get, on one hand, the ability to exploit all possible sources for historical reconstruction (historical, archaeological, linguistic, literary, artistic, philosophical , as well as audiovisual documents); moreover, he will learn to consider the intellectual expressions in their historical dimension.</td></tr>
<tr><td>Admission requirements</td><td colspan="3">Degree/Master in one of the following classes of degrees:
LM-2, LM-11, LM-14, LM-15, LM-37, LM-39, LM-43, LM-49, LM-62, LM-65, LM-78, LM-84, LM-85, LM-85 bis, LM-89, LM-90, LM-92, 2/S, 15/S, 16/S, 17/S, 18/S, 24/S, 42/S, 44/S, 55/S, 70/S, 93/S, 94/S, 95/S, 96/S, 97/S, 98/S, 99/S, 101/S.
Old system Degrees treated in the same classes or master degrees above according to Ministerial Decree 9th July 2009.
Academic title obtained abroad and eligible for access to the PhD program, previously recognized by academic authorities, even in the context of inter-university cooperation and mobility agreements. In the absence of such approval, the candidate must apply a request in the application form according to the Art. 3 of this call.</td></tr>
<tr><td rowspan="2">Available positions</td><td rowspan="2">8</td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>6</td><td>2</td></tr>
<tr><td rowspan="2">Type of scholarships
(Description awarding entity and research topic)</td><td>Scholarships funded by MIUR</td><td colspan="2">2</td></tr>
<tr><td>Scholarships funded by Regione Basilicata
"Convenzione Dottorati Innovativi con specializzazione in tecnologie abilitanti in Industria 4.0"</td><td colspan="2">1 scholarship tied to the following subject: "Digital publishing and storytelling. Sources, stories, hypertexts and e-books in Industry 4.0"

1 scholarship tied to the following subject: "Beyond Style. Magna Graecia Sculpture: integrated approaches and valorization"

1 scholarship tied to the following subject: "Historical research and Cultural and Creative Industries. Methods, tools and new technologies for the dissemination of historical knowledge in the digital era"</td></tr>
</table>

<table>
<tr><td></td><td></td><td colspan="2">The recipients of these scholarship will be requested to spend a period abroad (min 3 - max 6 months) and will be offered an internship in a company (min 6 - max 12 months); both the period abroad and the internship are compulsory.</td></tr>
<tr><td rowspan="2">Positions reserved for graduates in foreign universities</td><td rowspan="2"></td><td>With scholarship</td><td>Without scholarship</td></tr>
<tr><td>0</td><td>0</td></tr>
<tr><td>Positions without scholarship</td><td></td><td colspan="2"><u>2 positions</u></td></tr>
<tr><td>Admission procedure</td><td colspan="3">The admission procedure is conducted through the:
a) evaluation of qualifications
b) written test
c) interview

For applicants residing abroad, the admission procedure is conducted through the:
a) evaluation of qualifications
b) interview</td></tr>
<tr><td>Evaluation criteria</td><td colspan="3">a) evaluation of qualifications: up to a maximum of 20 points
They will be allowed to written test candidates who have achieved a rating of not less than 12 points
b) written test: up to a maximum of 40 points
They will be allowed to interview candidates who have achieved a rating of not less than 24 points
c) interview: up to a maximum of 40 points
The interview will be considered passed if the candidates will be given an overall rating of not less than 24 points

For applicants residing abroad:

a) evaluation of qualifications: up to a maximum of 20 points
They will be allowed to interview candidates who have achieved a rating of not less than 12 points
b) interview: up to a maximum of 80 points
The interview will be considered passed if the candidates will be given an overall rating of no less than 48 points

Minimum total score: 60 out of 100.</td></tr>
<tr><td>Interview by teleconferencing for candidates residing abroad (please see art. 5 of the Call- Annex D)</td><td colspan="3">Yes</td></tr>
<tr><td rowspan="4">Assessable qualifications</td><td>Graduation Thesis
(the candidate must also submit a summary in Italian or English of the thesis of max 16,000 characters)</td><td>Up to 1 points</td></tr>
<tr><td>Degree mark</td><td>Up to 13 points</td></tr>
<tr><td>Scientific publications
(Articles in national and international scientific journals , proceedings of scientific conferences, books or book chapters)</td><td>Up to 3 points</td></tr>
<tr><td>Other titles
(University degrees or Master Specialization, Research Grants, Scholarships, Erasmus scholarships and periods of activity abroad, …)</td><td>Up to 3 points</td></tr>
<tr><td>Written test program</td><td colspan="3">The written test will focus on the topics of the PhD program.</td></tr>
</table>

Interview program	The interview will focus on the topics of the PhD program and on the content of the written test. During the interview the knowledge of the Italian language will be assessed.
Foreign language	**English or French or German or Spanish** (knowledge of a foreign language will be assessed during the interview)
Schedule of the admission tests	**Evaluation of qualifications: results will be available from <u>September 10, 2018</u>** on the website http://portale.unibas.it/site/home/didattica/dottorati-di-ricerca.html **Day of the written test: <u>September 16, 2019 – 15:00</u>** Classroom Scotellaro - Department of Human Sciences (DiSU) – Via Nazario Sauro, 85, 85100 Potenza **Day of the interview: <u>September 19, 2019 - 9:00</u>** Boardroom - Department of Human Sciences (DiSU) – Via Nazario Sauro, 85, 85100 Potenza