

ANNEX 1/c		
PhD program: SCIENCE		
XXXIX CYCLE – a.y. 2023-2024		
Department	Department of Sciences - Potenza	
Coordinator	Prof.ssa Patrizia FALABELLA e-mail: patrizia.falabella@unibas.it	
Duration	3 years	
Web site	http://scienze.unibas.it/site/home/didattica/offerta-post-laurea.html	
Curricula	<ol style="list-style-type: none"> 1. Applied Biology 2. Geo-Sciences 3. Chemical Sciences 	
Aims and topics	<p>The Ph.D. "Science" brings together the educational and research experiences already gained, in the field of tertiary education, within the Department of Science. The course fits into the interdisciplinary field of chemical, geological, biological, pharmaceutical and natural sciences and is intended to provide students with tools for applied research in animal, plant, microbial and environmental biology, also through a One Health approach. The Ph.D. in "Science," incorporating the principles of the Program for a "Zero Waste Europe," aims to provide Ph.D. students with the basic concepts for the proper use of natural resources, green chemistry and the circular economy, i.e., an industrial economy in which any innovation in the production cycle must aspire to zero residue, aiming to reuse any material already used in the process, the development of new green technologies and processes and the design of new eco-friendly products. The course aims to provide the skills needed to carry out, at universities, research centers, public institutions or private entities, highly qualified research activities while contributing to the realization of the European Higher Education Area and the European Research Area and to the professional training of PhDs in line with the requirements of the recruitment policies of the National Recovery and Resilience Plan. The aim is to provide students with a solid preparation in both scientific knowledge and applied solutions (scientific method, ability to write and manage research projects, patenting skills, etc.), in order to conduct advanced research and experimentation and to know how to evaluate and exploit the results. In particular, the course aims to provide the tools to work in the fields of biology and chemistry, both basic and applied, as well as in the fields of environmental control and monitoring, control and use of resources and geo-resources, and the study of systems of geological interest.</p>	
Admission requirements	<ol style="list-style-type: none"> 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. 	
Available positions	6	With scholarship
		Without scholarship
		6
		0

Type of scholarships (Description awarding entity and research topic)	D.M. 118/2023	M4C1-INV.3.4 <u>1 scholarship "Digital and environmental transitions"</u> Topic: "Valorization of processing residues from the agri-food industry to obtain high-value healthy extracts". M4C1-INV.4.1 <u>3 Scholarships "PNRR-Research"</u> on one of the following topics: 1) Valorization of by-products deriving from the processing of mushrooms as a source of bioactive compounds and enzymes of industrial interest; 2) Integrated geological and structural analyses of the axial zone of the southern Apennine fold-and-thrust belt; 3) The gut microbiota in Duchenne muscular dystrophy (DMD): role of the transsulfuration pathway as a new therapeutic target: A period in the company or research center and abroad is mandatory.	
	Borse D.M. 117/2023	<u>1 scholarship in collaboration with the company "AGRIBIOSANA S.r.l. – Pietragalla (PZ)"</u> Topic: "Use of polymers and insect frass as innovative and eco-sustainable biofertilizers". A period in the company and abroad is mandatory.	
	ENEA	<u>1 scholarship</u> Topic: "Production of hydrogen from biomass through gasification and reforming processes catalytic, electrolysis". A period in the ENEA and abroad is mandatory.	
Positions reserved for graduates in foreign universities		With scholarship 0	Without scholarship 0
Admission procedure	The admission procedure is conducted through the: a) evaluation of qualifications b) evaluation, as part of the interview, of a research project , drawn up in Italian and English using the format set out in Annex C to the call for proposals, concerning the subject/type of grant for which you are competing (Ministerial Decree 117/2023, Ministerial Decree 118/2023, another specific topic) c) video conference interview using google meet		

Evaluation criteria	<p>a) evaluation of qualifications: up to a maximum of 25 points minimum score to access the interview 15 points</p> <p>b) interview: up to a maximum of 75 points the interview is passed for a score not less than 45 points</p> <p>Minimum total score: 60 out of 100</p>	
Assessable qualifications	<p>Graduation Thesis (The candidate must attach a summary of the thesis, in Italian or English, of max 16.000 characters)</p>	Up to 5 points
	<p>Degree mark (For candidates who have not yet obtained the degree, the weighted average of the marks obtained in all the exams of the degree program, taken on the date of submission of the application for admission, will be evaluated)</p>	Up to 16 points
	<p>Scientific publications (Articles in national and international scientific journals, proceedings of scientific conferences, poster, books or book chapters)</p>	Up to 2 points
	<p>Other titles (University degrees or Master Specialization, Research Grants, Scholarships, Erasmus scholarships and periods of activity abroad)</p>	Up to 2 points
Interview program	<p>The interview, which can be held in Italian or English, will focus on the discussion of the submitted research project and is aimed at ascertaining the candidate's scientific interests and aptitude for research.</p> <p>During the interview, the knowledge of the Italian language will be ascertained for foreign candidates.</p>	
Foreign language	English (knowledge of a foreign language will be assessed during the interview)	
Schedule of the admission tests	<p>Evaluation of qualifications: results will be available from <u>September 11, 2023</u> on the website http://portale.unibas.it/site/home/didattica/dottorati-di-ricerca.html</p> <p>Day of the video conference interview: <u>September 14, 2023 - 10:30 a.m.</u></p>	