

Ph.D. Program in Plant and Animal Science		
Coordinator	Prof. Stefania Masci	
Department	Department of Agriculture and Forestry Sciences (DAFNE)	
Partner Institutions	None	
Program duration	3 years: 1 st November 2017– 31 th October 2020 PhD thesis Defense: within April 2021	
Program objectives	<p>The overall objective of the course is to train young researchers able to tackle research in all its aspects, from the planning of a research project to its realization, to the interpretation and presentation of results. To complete the training, students will be addressed to select specific teaching courses and encouraged and supported financially to perform stages in national and international institutions. Their active participation in conferences will be encouraged.</p> <p>The specific research objectives concern various aspects of agricultural production, using both classical and innovative methods. These aspects include agronomy, animal husbandry, plant breeding, the use biotechnology for the understanding of biological and production aspects, the use of nanomaterials in agriculture or as raw materials, the development of methodologies for the synthesis of bioactive molecules and extraction of organic matter from waste matrices and agri-food, construction and use of biosensors for environmental monitoring and in the production chain, plant protection, the role of the environment in influencing the production and the productions influencing the environment, spatial planning and landscape, soil science, aspects of technological quality and nutritional value of plant and animal products, food safety and production</p>	
No. of positions	Total positions	7
	Positions with scholarships	6
	Positions without scholarships	1
Positions with scholarships	<p>n. 1 scholarship co-funded by Prof. Balestra and Tuscia University</p> <ul style="list-style-type: none"> • <i>Technological-predictive applications related to cereal disease agents</i> <p>n. 1 scholarship co-funded by Dr. Crinò (internal tutor Prof. Colla) and Tuscia University (to be carried out in ENEA-Casaccia, Rome, Italy)</p> <ul style="list-style-type: none"> • <i>Biodiversity of horticultural species, in particular of fennel, and resistance to diseases for sustainable agriculture</i> <p>n. 1 scholarship co-funded by Prof. Bernini and Tuscia University</p> <ul style="list-style-type: none"> • <i>Sustainable production of bioactive natural and semisynthetic molecules from plant matrices, waste and agro-industrial by-products</i> <p>n. 1 scholarship co-funded by Prof. Casa and Tuscia University</p> <ul style="list-style-type: none"> • <i>Estimation of agronomic variables by remote sensing and assimilation in cultivation patterns</i> <p>n. 1 scholarship co-funded by Dr. Santino (internal tutor Prof. Masci)</p>	

	<p>and Tuscia University (to be carried out in CNR-ISPA, Lecce, Italy)</p> <ul style="list-style-type: none"> • <i>Plant as a model system for the study of quality control of the endoplasmic reticulum in physiological and stress conditions</i> <p>n. 1 scholarship co-funded by Prof. Speranza and Tuscia University</p> <ul style="list-style-type: none"> • <i>Stochastic patterns for plant protection</i>
Positions without scholarship	<p>n. 1 at DAFNE (Prof. Casa)</p> <ul style="list-style-type: none"> • <i>Development of methodologies and assimilation algorithms of remote data in agronomic models to support precision fertilization in herbaceous crops</i>
Admission requirements	<p>Application to the public competition is open to all, regardless of age and citizenship, who, by the date this call expires, possess one of the qualifications listed hereunder:</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 31, 2017. In such cases admission will be “conditional”; the applicants will send by mail (dottorati@unitus.it) or hand out to the “Ufficio Offerta Formativa” 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 in possess of the admission requirements must indicate the date by which they expect to have obtained the qualification.</p>
Evaluation of candidates (maximum score: 80/80 points)	<p>Evaluation of academic qualification and oral exam</p> <p>Knowledge of the English Language</p> <p>The evaluation of qualifications is preliminary to the oral exam. The score obtained by candidates after the evaluation of their qualifications will be added to the score of the oral examination. The results will be published on the Tuscia University web site (www.unitus.it) at the section “Didattica” > “Dottorati di Ricerca”. Together with the application form, candidates should submit a research project, within the themes of the Ph.D. course (but not necessarily linked to the specific subjects of the positions indicated), up to a maximum of 5 pages, which must be written in Italian or English. The research project will be discussed during the oral exam. Moreover, the candidate may indicate the specific position in which he/she is mostly interested, although this is not legally binding</p>
Evaluation of academic qualification (maximum score: 15/80 points)	<ul style="list-style-type: none"> - Master’s thesis: max score 3 - Academic career (Certificate with the list of marks obtained during the academic career and final graduation): max score 2 - Scientific publications relating to the areas of Ph.D.: max score 3 - Participation in research projects: max score: 1 - Professional experiences and other qualifications that the candidate

	<p>considers useful: max score: 4 - Research project: max score: 2</p>
Evaluation of oral examination (maximum score: 65/80 points)	<p>Oral exam: maximum score 65/80 points Minimum score required to pass the oral interview 40/80 points Language for the examination: Italian (Italian candidates) or English (foreign candidates). Foreign candidates may ask to take the oral exam by Skype, previous agreement with the Commission</p>
Examination topics	<p>The oral exam will focus on the discussion of the topics of the Ph.D. programme, as well as the discussion of the research project presented. It will be aimed at verifying the candidate's aptitude for the scientific research. Candidates will be asked to read and translate paragraphs written in English of scientific papers related to the topics of the Ph.D. programme</p>
Exam date and locations	<p>The exam will be held in September/October 2017. The exam schedule will be published on the University website within the deadline of the call (September 5, 2017) http://www.unitus.it/it/unitus/post-lauream1/articolo/dottorati-di-ricerca</p>
Contacts for information	<p>Contacts for Ph.D. Programme:</p> <ul style="list-style-type: none"> • Prof. Stefania Masci. e-mail masci@unitus.it • Dr. Francesco Sestili e-mail: francescosestili@unitus.it