



UNIVERSITÀ  
DEGLI STUDI DI BARI  
ALDO MORO

DIPARTIMENTO DI  
SCIENZE DEL SUOLO, DELLA  
PIANTA E DEGLI ALIMENTI

LAUREA MAGISTRALE IN  
MEDICINA DELLE PIANTE  
INTERNATIONAL JOINT MASTER DEGREE IN  
PLANT MEDICINE



General information	
Academic subject	<b>Integrated Weed Control (Module of I.C. Agricultural acarology, nematology and weed management)</b>
Degree course	<i>Master's degree course in Plant Medicine (LM69)</i>
Academic Year	2021-2022
European Credit Transfer and Accumulation System (ECTS)	3
Language	<i>Italian</i>
Academic calendar (starting and ending date)	
Attendance	<i>NO</i>

Professor/ Lecturer	
Name and Surname	Eugenio Cazzato
E-mail	Eugenio.cazzato@uniba.it
Telephone	+ 39 080 544 2973
Department and address	<i>Department of agricultural and environmental science Via Amendola, 165/A – Bari, Italy</i>
Virtual headquarters	
Tutoring (time and day)	Every day excluding Saturday (by appointment). Tutoring could be also on e-learning platforms.

Syllabus	
<b>Learning Objectives</b>	<i>Knowledge of the main weed species in the Mediterranean area and of their eco-physiological characteristics. Acquisition of control techniques in relation to different agricultural systems.</i>
<b>Course prerequisites</b>	<i>General knowledge of agronomy required for admission to the Master's Degree Course in Plant Medicine.</i>
<b>Contents</b>	<i>Definition and classification of weeds. Biology and ecology of weeds: dormancy, reproduction strategies, spreading in the time and space, germination and emergence, soil seed bank evolution. Quantitative and qualitative damages caused by weeds. Allergies, obstacles to cropping activities. Weed-crop competition. Allelopathy and parasitic plants. Weeds hosting pests. No chemical weed control: mechanical, physical, biological and ecological strategies. Chemical weed control: historical information. Herbicides: definition, classification, chemical and physical properties, toxicological and eco-toxicological activities, formulations and coadjuvants. Principles of integrated weed management. Study and surveying methods for weed community. Examples of Integrated Weed Management in Mediterranean crops. Soil management in orchards and grass covering: effects on soil and plants. Weed control in civil areas</i>
<b>Books and bibliography</b>	<ul style="list-style-type: none"> <li>• Catizone, P., Zanin, G., Malerbologia. Patron Editore, 2001, Bologna.</li> <li>• Notes of lectures.</li> </ul>
<b>Additional materials</b>	

Work schedule			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
<b>Hours</b>			
75	16	14	45
<b>ECTS</b>			



3	2	1	
<b>Teaching strategy</b>		Lectures will be presented through PC assisted tools (Powerpoint, Adobe Acrobat, ect.).	
<b>Expected learning outcomes</b>			
<b>Knowledge and understanding on:</b>		<ul style="list-style-type: none"> <li>○ Knowledge about the weed biology and physiology.</li> <li>○ Knowledge about weed-crop interaction dynamics.</li> <li>○ Knowledge about agronomic techniques and technical means for the integrated weed control.</li> </ul>	
<b>Applying knowledge and understanding on:</b>		<ul style="list-style-type: none"> <li>○ Knowledge about weed identification and characterization.</li> <li>○ Understanding the effects on crops.</li> <li>○ Knowledge about use of technical means.</li> </ul>	
<b>Soft skills</b>		<ul style="list-style-type: none"> <li>• <i>Making informed judgments and choices</i> <ul style="list-style-type: none"> <li>○ Ability to analyze different situations in farms and planning appropriate actions for the integrated weed control to improve the quality and efficiency of crop growing, including the sustainability and eco-compatibility of the strategies.</li> </ul> </li> <li>• <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> <li>○ Personal skills aimed at communication, multidisciplinary group work and judgmental skills both at technical and human level.</li> </ul> </li> <li>• <i>Capacities to continue learning</i> <ul style="list-style-type: none"> <li>○ Expected learning outcomes, as knowledge and ability, are reported in the annex A of the Didactic Regulation of the course Plant Medicine (expressed by European Descriptors).</li> </ul> </li> </ul>	

<b>Assessment and feedback</b>			
<b>Methods of assessment</b>			
<b>Evaluation criteria</b>		<ul style="list-style-type: none"> <li>• <i>Knowledge and understanding</i> <ul style="list-style-type: none"> <li>○ Ability to understand the type of infestation and to be able to evaluate the effects on crops.</li> <li>○ Ability to plan strategies of weed flora control</li> </ul> </li> <li>• <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> <li>○ To be able to apply integrated control techniques to improve the qualitative, quantitative and sanitary aspects of crop production.</li> <li>○ <i>Autonomy of judgment</i> <ul style="list-style-type: none"> <li>○ To be able to critically evaluate the different situations and plan efficient actions weed flora management</li> </ul> </li> </ul> </li> <li>• <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> <li>○ Assessment of personal skills, aimed at communication, multidisciplinary group work and judgmental skills, both in the technical and the human and ethical level.</li> </ul> </li> <li>• <i>Communication skills</i> <ul style="list-style-type: none"> <li>○ Ability to organize the acquired knowledge in form of didactic presentation and to articulate it for didactic purposes</li> </ul> </li> <li>• <i>Capacities to continue learning</i> <ul style="list-style-type: none"> <li>○ The assessment of the student's preparation is done on the basis of predefined criteria, as detailed in Annex A of the Master's Degree Course Code. For students who have supported the exemption test, the assessment of the profit test is expressed in thirtieth and averaging the votes obtained.</li> </ul> </li> </ul>	
<b>Criteria for assessment and attribution of the final mark</b>		The exam consists of an oral exam on the topics developed during the hours of lecture and theory and practice in the classroom and in the laboratory / production	



UNIVERSITÀ  
DEGLI STUDI DI BARI  
ALDO MORO

DIPARTIMENTO DI  
SCIENZE DEL SUOLO, DELLA  
PIANTA E DEGLI ALIMENTI

LAUREA MAGISTRALE IN  
MEDICINA DELLE PIANTE  
INTERNATIONAL JOINT MASTER DEGREE IN  
PLANT MEDICINE



	<p><i>farms, as reported in the Academic Regulations for the Master Course “Plant Medicine” (Art. 9) and the plan study (Annex A).</i></p> <p><i>The evaluation of the student's preparation is based on pre-established criteria, as detailed in Annex A of the Academic Regulations for the Degree Course “Plant Medicine”.</i></p> <p><i>For students who have stood the test of exemption, the examination of profit assessment is of thirty, and averaging the obtained votes.</i></p>
<b>Additional information</b>	