

General Information	
Academic subject	<b>Urban Entomology (Module of I.C. Applied Entomology for Mediterranean crops)</b>
Degree course	<b>Master Course in Plant Medicine (LM69)</b>
Curriculum	
ECTS credits	3
Compulsory attendance	No
Language	Italian

Subject teacher	Name Surname	Mail address	SSD
	<b>FRANCESCO PORCELLI</b>	francesco.porcelli@uniba.it	AGR11

ECTS credits details			
Basic teaching activities	Plant Protection disciplines		

Class schedule	
Period	Second semester
Year	First year
Type of class	Lectures, 4 ECTS (32 hours) Laboratory and field classroom and workshops, 2 ECTS (28 hours)

Time management	
Hours	75
In-class study hours	30 (16 Lectures + 14 Lab & field cl.)
Out-of-class study hours	45

Academic calendar	
Class begins	March 5, 2018
Class ends	June 22, 2018

Syllabus	
Prerequisites/requirements	General knowledge on Arthropods
Expected learning outcomes	<p><i>Knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Taxonomy, epidemiology, bionomics of urban pests</li> <li>○ Urban pest identification</li> </ul> <p><i>Applying knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Ability to manage urban ecosystem pests.</li> <li>○ Ability to use proper control means, and formulates to urban IPM.</li> </ul> <p><i>Making informed judgements and choices</i></p> <ul style="list-style-type: none"> <li>○ Skill in urban environment analysis and in sustainable and eco-compatible pest control actions timing and placement</li> </ul> <p><i>Communicating knowledge and understanding</i></p> <ul style="list-style-type: none"> <li>○ Communication skill by one more than Italian European written and spoken language, at least.</li> </ul> <p><i>Capacities to continue learning</i></p> <ul style="list-style-type: none"> <li>○ Continuous learning in career.</li> </ul>
Contents	<p><i>The course is tailored and focused on the diverse urban ecosystem management options. Recognition, management and control of urban green pest and contaminants arthropods plus "ex-post" control action effect estimation are the main topics of teaching. The course target to qualify the student as a technical consultant and expert witness mastering the topic by discussing several effective pest population management strategies and control means.</i></p> <p>Urban ecology and arthropods population dynamic in urban areas</p>

	and parks. General entomology topics are discussed as needed for pest and damage control. Main features of urban and artificial environments, damage concept and nature. Control VS management, sampling procedures and damage estimation, IPM (Integrated Pest Management), ruling, hygiene (sanitization). Physical, biological, chemical and natural control. Pest bionomics and consequents control strategies for: Dermaptera, Blattodea, Isoptera, Hemiptera, Thysanoptera, Coleoptera, Diptera, Lepidoptera, Hymenoptera and lesser Taxa.
Course program	
Bibliography	<ul style="list-style-type: none"> <li>• Parris K.M. 2016 - Ecology of Urban Environments. Wiley Blackwell, ISBN: 9781444332643 (Hardback) ISBN: 9781444332650 (Paperback), 224 pp.</li> <li>• Partho Dhang (Ed.) 2014 - Urban Insect Pests Sustainable Management Strategies. C.A.B. International, ISBN-13: 978 1 78064 275 8, 249 pp.</li> <li>• Roques A, Kenis M., Lees D., Lopez-Vaamonde C., Rabitsch W., Rasplus J.-Y., Roy D.B. (Ed.s) 2010 - Alien terrestrial arthropods of Europe. Special Issue, BioRisk, 4: 1021 pp. <a href="http://pensoftonline.net/biorisk">http://pensoftonline.net/biorisk</a></li> </ul>
Notes	
Teaching methods	Handouts in English are given at course kick-off, with Keynote and .pdf presentations.
Assessment methods	<p><i>Partial written: will be given in the form open written test questions. Candidate will apply replying about one hundred questio. The assessment of the Partial will last for one year and will concur to the vote of the Integrated Course. The student will sustain the Partial on a volunteer basis.</i></p> <p><i>Exam oral: will be given in the form of topic discussion on the same arguments proposed in Partial and found in handouts and textbook. Candidate will discuss three topics picked from about the one hundred highlighted in handouts and textbook. The Exam evaluation will concur to the vote of the Integrated Course. The student will sustain the Exam as detailed in the proper calendar.</i></p> <p><i>The evaluation of candidate Partial and Exam are in Annex "A" of the Master Course didactic rules that follow the common European reference framework. Being the handouts and the textbook in English, international students will follow the lessons in Italian and prepare the Partial and the Exam, as Italians will do.</i></p>
Evaluation criteria	<ul style="list-style-type: none"> <li>• <b>Knowledge and understanding</b> <ul style="list-style-type: none"> <li>○ Order, Family and main urban pest identification. Pest niche, bionomics and damages assessment.</li> </ul> </li> <li>• <b>Applying knowledge and understanding</b> <ul style="list-style-type: none"> <li>○ Ability to target the proper control actions components for built an effective IPM strategy versus urban pests.</li> </ul> </li> <li>• <b>Making informed judgements and choices</b> <ul style="list-style-type: none"> <li>○ Skill to adapt control means and strategies to actual urban pest control situation.</li> </ul> </li> <li>• <b>Communicating knowledge and understanding</b> <ul style="list-style-type: none"> <li>○ Ability to share the ratio and expected results of urban pest control chooses and opportunities with social and private environments.</li> </ul> </li> <li>• <b>Capacities to continue learning</b> <ul style="list-style-type: none"> <li>○ Skill to evolve knowledge and pest management background to follow changes in commitment requests.</li> </ul> </li> </ul>
Further information	<b>Visiting hours:</b> Tuesday and Thursday, please e-mail to agree on time.

