



Entomological Collections, Insect Systematics and Evolution

Organized by:

Centre for Ecology, Evolution and Environmental Changes and Museu Nacional de História Natural e da Ciência (<http://www.MUHNAC.ul.pt/>)

Teachers:

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Calendar: October 15th-19th, 2018

Duration: 36 hours (TP) of lectures and practical sessions

Schedule: 9h00-12h30 and 14h00-18h00 Monday to Thursday; 9h00-13h00 and 14h30-17h00 Friday

Objectives:

The course “Entomological Collections, Insect Systematics and Evolution” will comprehend a general introduction to entomology and entomological collections, covering the steps various steps for the creation of such a collection: specimen capture and preparation, cataloguing, digitizing and data publication. The aim of this course is to provide the students with the basic tools for the constitution and management of an entomological collection as well as a primer on general entomology, covering general areas as insect systematics, evolution and plant-insect interaction.

This course has a recognition of 6 ECTS for FCUL PhD students enrolling in it as part of their first doctoral year. For FCUL PhD students only requiring 5 ECTS in their specific PhD programmes, the last 6 hours of the course are not mandatory and the certificate will be on 'Topics in Natural History Collections and Biodiversity'.

General plan:

A. General introduction to entomology:

- Introduction to entomology, covering several subjects, such as insect morphology, phylogenetic relations and (4h)
- Insect collection methods, including field work on the botanic garden (6h)
- Insect evolution and phylogenetic relations (1h)

B. Scientific entomologic collections:

- Insect preparation and preservation, including practical laboratory work on preparing, labelling and cataloguing of specimens (8h)
- Collection data management (2h)
- Collection digitization (2h)
- Visit to MUHNAC's entomologic collection (1h)

C. Subjects on entomology

- Insect-plant interaction (1h)
- Detection of introgression between native and introduced species (1h)
- Entomologic collection based research (2h)
- Final review and discussion (2h)
- Theme presentation and discussion (6h)

Nr students: 7 (min) - 14 (max)

Minimal formation of students: bachelor degree in Biology or related areas

Directed to: PhD or MSc students in Biology, Evolution, Ecology or related areas, and postdocs and other professionals working in related topics.

Fee: free for 1st year PhD students in the Doctoral program in Biology (FCUL), Biodiversity, Genetics and Evolution (BIODIV UL; UP) and Biology and Ecology of Global Changes (BEAG UL, UA) when the course counts credits for their formation, in which case the delivery of a final report done after the course is mandatory; 50 € for more advanced PhD students of cE3c; 80 € for PhD students of the PEERS network (CFE); 125 € for FCUL Master students and unemployed; 180 € for BTI, BI and other PhD students; 250 € for Professional and postdocs.

When the maximum number of students is reached 7 vacancies will be available for non-paying 1st year PhD students mentioned above, being, by order of preference: 1) cE3c students; 2) BIODIV students (not from cE3c); 3) FCUL students (not from cE3c); 4) BEAG students (not from FCUL).

Deadline for applications: September 28th, 2018

To apply send an e-mail to Luis Filipe Lopes at the following email address: llopes@museus.ul.pt with a cv and motivation letter. The cv and letter should be named as *1st-lastNAME-CV.pdf* and *1st-lastNAME-ML.pdf* (that is personalize the name of each file with your first and last name).

In the email please add the following information:

Full Name:

E-mail:

Phone:

Professional activity: Professional/Postdoc, BTI, BI (or other non-post-doc research grant), PhD student (with/ without scholarship), Lic. (Bachelor)/Master student

Academic formation:

PhD student of the 1st year of Doctoral programme BIODIV (FCUL/FCUP), Biologia (FCUL) or BEAG (FCUL or UA)?:

If yes to the above question, PhD student doing the Course to count credits for 1st year?:

PhD student of cE3c or CEF (Centro de Ecologia Funcional):?

If PhD student from another programme/centre, which: