



Berlin Summer Course in Flower Morphology and Angiosperm Diversification 28 July – 8 August 2025

This is the third version of a highly successful two-week workshop based at the Biological Institute of the Freie Universität Berlin and the Berlin Botanical Garden. The workshop benefits from extensive facilities, including functional microscopy laboratories and a huge plant collection of more than 20,000 species. The course is set up as lecture-based, laboratory taught, and interactive visits of the living collections.

INTENDED AUDIENCE:

Final year undergraduate students, PhD students, post-doctoral and advanced researchers, professionals (but no formal restriction). A basic knowledge of botany is preferred but not essential.

COURSE INSTRUCTORS AND CONTACT:

Dr. Louis Ronse De Craene, Research Associate Royal Botanic Garden Edinburgh (l.ronedecraene@gmail.com)
Prof. Julien Bachelier, Freie Universität Berlin (julien.bachelier@fu-berlin.de)

REGISTRATION FEE:

€800 (€600 for Undergraduate and Master students)

(Registration includes coffee breaks, daily lunches with snacks, but does not include travel and accommodation).

TO APPLY, PAY AND SECURE A PLACE:

visit <https://www.conftool.net/berlin-summer-course-2025/>

For further information please contact Dr. Louis Ronse De Craene (l.ronedecraene@gmail.com).

PROGRAMME:

Course Description and outline:

This short course will introduce students to the structure and development of flowers, with a focus on floral diversity and evolution and the significance of flowers for systematics. Major plant families will be studied within the framework of the main lineages of seed plants to understand their evolution and diversification. Additionally, students will learn to analyse, describe, and study the structure of inflorescences, flowers, and fruits, and based on their observations, to identify the main evolutionary patterns underlying their tremendous morphological diversity, as well as their potential pollination and dispersal mechanisms.

Course objectives and learning outcomes:

Through this course students will acquire the following skills:

- guidelines to identifying plants using morphological characters in the context of the molecular classification system.
- a better understanding of the origin and evolution of floral structures, including their importance for classification, and of the main developmental patterns and evolutionary trends which underlie the tremendous diversity of reproductive structures.
- an ability to observe and recognise key characters through the study of live floral material and the building up of floral diagrams.

Contents:

- Introduction to morphology of vegetative structures and flowers, inflorescence and flower structure (floral diagrams and formulas).
- Overview of major groups of flowering plants; major characteristics of Flowers and special attributes (phyllotaxis, aestivation, merism, symmetry, floral tubes and hypanthia).
- Floral evolution of the major clades of angiosperms with special emphasis on morphological adaptations and diversification.