

THE WAGNER FREE INSTITUTE OF SCIENCE

Winter 2021

BOTANY SERIES

Knowing the Plant Families: Shortcuts to Plant Identification

Professor Karen Snetselaar

Dates: 6 Thursdays, February 18 – March 25, 2021

Time: Classes will meet online from 6:30 to 7:45 PM

This course will be held online on Zoom. Registration is required.

Course registration is through Eventbrite. You will receive confirmation of your registration by email with information about how to access the Zoom meetings.

Course Description

The diversity in the flowering plants is enormous; more than 350,000 species have been named. Recognition of species can be a difficult task, even for the expert. However, species have been grouped into about 400 larger taxonomic units known as families. Families usually share leaf, flower, and fruit characters that allow for easy recognition. The ability to assign unknown plants to the correct family is a useful skill for anyone interested in plant identification and culture. This course will survey several dozen plant families with important representatives in our forests and gardens. In addition to learning the important recognition features, the course will discuss representative members of each family based on their economic and ecological importance.

Course Schedule

1. **Thursday, February 18, 2021 – Introduction to Plant Systematics: History and methods**
2. **Thursday, February 25, 2021 - Waterlilies, magnolia, poppies, buttercups, sycamores and related families.**
3. **Thursday, March 4, 2021 - Crassulas, cacti, carnations, smartweeds, cucumbers, beans, birches, oaks and related families.**
4. **Thursday, March 11, 2021 - Roses, mustards, citrus, maples, heaths, and related families.**
5. **Thursday, March 18, 2021 - Mints, tomatoes and potatoes, figworts, carrots, and related families.**
6. **Thursday, March 25, 2021 - Monocots: Lilies, grasses, and related groups.**

Suggested References

No textbook is required. The following resources may be useful:

Plant Systematics. Michael Simpson, Elsevier Press. Available in hard cover and online format. This is a complete text with great photographs. There are three editions; if you have subscription access to a bundler like EBSCO, you may be able to get the earlier editions free.

The Plants of Pennsylvania: An Illustrated Manual. Ann Fowler Rhoads and Timothy A. Block. University of Pennsylvania Press, 2000. Excellent for local native plants. Smaller field guides (such as Peterson's) are also useful.

Manual of Woody Landscape Plants. Michael Dirr. Useful for non-native and horticultural varieties of shrubs and trees.

There are some great websites, including this one from Dr. Gerald Carr:

<http://www.botany.hawaii.edu/faculty/carr/pfamilies.htm>

About the Professor

Dr. Karen Snetselaar is Professor Emeritus of Biology at Saint Joseph's University. She has been a member of the faculty of the Wagner Free Institute of Science since 2000. Her research focuses on fungi and plant disease. She is also interested in urban ecology and in promoting public understanding of science, especially science education outreach into K-12 schools. She leads the Wagner's partnership with Saint Joseph's University, GeoKids LINKS, which brings intensive science learning into North Philadelphia schools.

Course Contact Information

The course is presented by the Wagner Free Institute of Science. Founded in 1855, the Wagner is dedicated to providing free science education to the public. It also operates a National Historic Landmark museum and library. The museum is currently closed to the public. For current programs and schedules, please follow us on Facebook and sign up for our newsletter through the link on the home page of our website www.wagnerfreeinstitute.org.

Wagner staff will facilitate the course. For questions about program logistics, please contact Susan Glassman, Executive Director at susang@wagnerfreeinstitute.org or leave a message at 215-763-6529 x14.
