Revised: Fall 2016

BIO 215 Plant Life of Virginia

COURSE OUTLINE

Prerequisites:

None.

Course Description:

Focuses on identification and ecological relationships of the native plants of Virginia. Emphasizes shrubs, vines, weeds, wildflowers, ferns, and mushrooms.

Semester Credits: 3 Lecture Hours: 2 Lab/Recitation Hours: 3



BIO 215 Plant Life of Virginia

Course Outcomes

At the completion of this course, the student should be able to:

- 1. Demonstrate a basic knowledge of the Linnaean System of plant naming.
- 2. List the major geological provinces in the State of Virginia and understand how they provide different habitats for plants.
- 3. Identify unknown plants using a variety of dichotomous keys.
- 4. Identify on sight a list of plants designated for students to recognize (approximately 200 species observed and identified on field trips).
- 5. Recognize the major families of plants represented by the plants on the list to be identified on sight and understand the evolutionary relationships within vascular plants.
- 6. Recognize the major families of plants represented by the plants on the list to be identified on sight and understand the evolutionary relationships within vascular plants.
- 7. Describe a typical habitat for each of the plants on the list to be identified on sight.
- 8. Discuss the ecological importance of selected plants from the list to be identified on sight, including invasive, alien species.
- 9. Explain ecological factors that are important for endangered and threatened plant species and rare plant communities in Virginia.
- 10. Recognize key wetland plant species and discuss the adaptations of wetland plants.



BIO 215 Plant Life of Virginia

Textbooks:

Newcomb's Wildflower Guide. Lawrence Newcomb. Paperback. 490 pages Publisher: Little, Brown and Company (April 13, 1989) ISBN-13: 978-0316604420 (REQUIRED)

Common Native Trees of Virginia. 2007. Virginia Department of Forestry Tree Identification Guide. (REQUIRED) Available from www.dof.virginia.gov at this website: https://secure01.virginiainteractive.org/shoppingcart/cgi-bin/shopva.cgi?store=507

Wildflowers and Plant Communities of the Southern Appalachian Mountains and Piedmont: A Naturalist's Guide to the Carolinas, Virginia, Tennessee, and Georgia (Southern Gateways Guides) Timothy Spira. 2011. The University of North Carolina Press (April 5, 2011). ISBN-13: 978-0807871720 (REQUIRED)



Week	Topic
#1	Flowers and Vegetative Morphology Introduction to Keying, Field Trip on Campus
#2	What is a Plant? Non-vascular and Vascular Plant Life Cycles
#3	Introduction to Angiosperm Phylogeny 7 Key Angiosperm Families; Community Ecology
#4	Angiosperm Ecology – Invasive Species; Wetland Plants Invasive Alien Plant Species Project Due
#5	Seeds, Fruits and Dispersal
#6	Angiosperm Ecology – Endangered & Threatened Plants ETS Project Due
#7	Angiosperm Phylogeny – Re-visited: Pteridophytes (Ferns), Mosses and Liverworts Plant Communities - Final Wrap-up Plant Communities Presentations projects due
#8	Angiosperm Phylogeny of Foods & Fibers Angiosperm Phylogeny + Fruits and Seeds

Notes to Instructors

- 1. Departmental policy dictates that instructors do not allow students to keep tests.
- 2. A comprehensive final exam counting 15% 20% of the total grade will be given at the end of the semester. A final lab practical also will be given.
- Syllabus should state what the course grade will be based on, such as tests, quizzes, a comprehensive final exam, and any other assignments made by the instructor.
- 4. The VWCC Biology Department uses a 10 point grading scale.

