

Virginia Western Community College

BIO 215

Plant Life of Virginia

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

Laboratory/Recitation Hours: 3

Required Materials

Textbooks:

Communities of the Southern Appalachian Mountains and Piedmont. Spira. 1st edition. The University of North Carolina Press. ISBN: 9780807871720

Newcomb's Wildflower Guide. Newcomb. 1st edition. Little, Brown & Company. ISBN: 9780316604420

Course Outcomes

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

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

Topical Description

| <u>Week</u> | <u>Topic</u> |
|-------------|--|
| 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.
3. The 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.