

## BIOL 5600 LOCAL FLORA

FALL SEMESTER 2011

Instructor: Dr. Carter  
Office: BC 1040 or BC 1105  
Telephone: (229) 333-5763, ext. 5338

Mon: Lec AB 2:00 – 3:15 PM, BC 2040  
Mon: Lab B 3:30 – 6:20 PM, BC 2040  
Tues: Lab A 2:30 – 5:20 PM, BC 2040  
Wed: Lec AB 2:00 – 3:15 PM, BC 2040

BC 1040 or BC 1105  
Tues., 1:00 – 2:00 PM; Wed., 3:30 – 5:00 PM; other times  
by appointment

### Course Description

A field-oriented study emphasizing identification, distribution, and ecology of locally occurring seed-bearing plants. Identification using floristic manuals and sight identification of the common native woody flora will be stressed during laboratory. Pre-requisite: BIOL 1107 and BIOL 1108, or permission of instructor.

### Course Outcomes

Following is a list of course outcomes linked to Biology Department Educational Outcomes (B) and Valdosta State University General Educational Outcomes (V).

The student will collect, document, and prepare herbarium specimens, using proper ethical standards, especially regarding rare, threatened or endangered species.

The student will demonstrate sufficient proficiency with dichotomous keys in a regional floristic manual to identify unknown specimens reliably.

The student will be able to identify in the field common local native and naturalized plants by family and genus names, including the indicators of the major plant communities.

The student will be able to identify and describe major plant communities in the Georgia coastal plain.

The student will demonstrate the ability to handle and analyze plant materials in the laboratory and in the field. [B1; V 5, 7]

The student will demonstrate the ability to use scientific equipment effectively in the laboratory and in the field. [B1; V4, 5, 7]

The student will demonstrate comprehension of basic concepts and the ability to use scientific terminology accurately through effective oral and written communication and use of dichotomous keys in a regional floristic manual. [B1; V4, 5, 7]

The student will demonstrate the ability to follow oral and written instructions effectively. [V 4, 7]

The student will demonstrate the ability to access course resources and complete assignments on-line using computer technology (i.e., BlazeVIEW). [V 3]

The student will demonstrate the ability to complete assignments and tests ethically. [V 8]

### Required Texts

Radford, H.E. Ahles & C.R. Bell

by A.E.



semester. Collectively, the field identification quizzes account for 10% of the course grade.

Keying quizzes. Several keying quizzes will be given to measure proficiency using dichotomous keys in

. Substantial lab time will be devoted to supervised determination of unknown specimens, with dichotomous keys. It is imperative that students attend lab and field trips regularly and practice identification of specimens in order to develop proficiency with these keys. Collectively, the keying quizzes account for 20% of the course grade.

Class project and plant collection. As a group, the class will inventory the flora of the Lake Louise Field Station (LLFS). Collection of voucher specimens is the standard way to document any floristic inventory. Therefore, in order to document our work, we will collect a set of vouchers and images during our weekly field

## COURSE SCHEDULE WITH LIST OF MAJOR TOPICS

FALL SEMESTER 2011

Note: Items shown in bold are assignments posted on BlazeVIEW. The complete lecture outline with reading and other assignments, eHandouts, and links to useful web sites can be found under Course Content in BlazeVIEW. Various special dates, including holidays and Saturday and weekend field trips, are shown in .

## Week 1: 15 August

Introduction, Identification, classification, & nomenclature  
Structure & terminology: flowers & inflorescences  
Lab: Botany Lab (BC 2040)

## Week 2: 22 August

Diversity in leaf form: On-campus leaf collection  
Structure & terminology: underground parts, stems, leaves, surface features  
Biohazards in the field  
Preparation for field work  
Lab: Botany Lab (BC 2040)

## Week 3: 29 August

Structure & terminology: underground parts, stems, leaves, surface features  
Lab: Field trip, Lake Louise FS

## Week 4: 05 September

Structure & terminology: habit, fruits & seeds  
Using dichotomous keys in a floristic manual  
Lab: Field trip, Lake Louise FS

## Week 5: 12 September

The herbarium  
Collection & care of voucher specimens  
Uses of the herbarium & floristic data  
Lab: Field trip, Lake Louise FS

## Week 6: 19 September

Recording data  
Keeping a field notebook  
Where in the world were we?  
Lab: Field trip, Lake Louise FS

## Week 7: 26 September

Rare, threatened, & endangered flora  
Survey of protected species  
Lab: Field trip, Lake Louise FS

## Week 8: 03 October

Non-indigenous flora  
Alien invaders  
Lab: Field trip, Lake Louise FS

## Week 9: 10 October

Poisonous plants  
Poisonous plants  
Lab: Field trip, Lake Louise FS

## Week 10: 17 October

Phytogeography  
How do we classify the vegetation at Lake Louise?  
Lab: Field trip, Lake Louise FS

## Week 11: 24 October

Vegetation Classification  
Physiography & flora  
Lab: No lab this week, because of holiday

## Week 12: 31 October

Plant family survey  
Lab: Field trip, Lake Louise FS

## Week 13: 07 November

Plant family survey  
Lab: Field trip, Lake Louise FS

## Week 14: 14 November

Plant family survey  
Lab: Field trip, Lake Louise FS

## Week 15: 21 November

Plant family survey  
Lab: Field trip, Lake Louise FS

## Week 16: 28 November

Plant family survey  
Lab: Field trip, Lake Louise FS

Mon., 05 Dec. – Last Day of Classes