

Taxonomy of Local Flora Laboratory Syllabus BSC 433L/533L

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Texts: *Manual of the Vascular Flora of the Carolinas*, Radford, Ahles and Bell, 1968 (required)
Forest Plants of the Southeast, Miller and Miller, 1999, (optional)
Wildflowers of Mississippi, Timme, 1989 (optional)

Other required items: field notebook

If a student has a disability that qualifies under the Americans with Disabilities Act and requires accommodations, he/she should contact the Office for Disability Accommodations for information on appropriate policies and procedures. Box 8586; Tel. 266-5024; TTY 266-6837; Fax 266-6035. Suzy Hebert is the ODA coordinator.

Course Objectives - Upon completion of this course the student should be able to:

1. Recognize morphological characteristics and use the terminology necessary for the identification of native plants
2. Use taxonomic keys to identify unknown plants.
3. Recognize by sight common plants native to Mississippi.
4. Apply the proper taxonomic scheme and nomenclature to the native plants of Mississippi.
5. Recognize and describe the morphological differences between the common families.
6. Identify important non-native and economic species.

Field Quizzes:

We will have field quizzes on many of our field trips after a few weeks of class. You will be tested on sight identification of plants you have been formally introduced to during previous classes (either field trip or lab) and on the keying of unknowns. You will be expected to know and spell the Latin names.

You will also be asked to apply material covered in previous class periods, i.e.-describe anatomical structures, etc.

Plant Collection (general):

You will turn in a collection notebook which should include the following information for each species: habitat description, site directions (include county), specimen description. Each specimen is worth 3 points (1 point for specimen label, 1 point for genus, 1 point for species)

Due Dates: mid-semester - 25 species (Thursday, February 28)

last lab session - 45 species and collection notebook (Thursday, May 1)

Species Requirement: 70 different native plants, correctly identified to species, pressed with neatly labeled 3x5 index cards. Cultivated ornamentals do not count toward the required total of 100 species. At least 40 families must be represented in the final collection. It is sufficient to place specimens in folded newspapers – one specimen plus label per folded newspaper. The size of the specimen must be no larger than that of a standard herbarium sheet. Thirty specimens will be selected and mounted on properly labeled herbarium sheets.

Only specimens that show all of the characters necessary for proper identification will be accepted.

The specimen must include fully developed reproductive parts necessary for identification.

The label should include the following:

- (1) family, genus, specific epithet and author
- (2) where you collected it, you must be specific enough with your description so that someone else can find the location where you collected the specimen
- (3) relevant ecological data (e.g. beside stream, north-facing slope, etc.),
- (4) descriptive information not evident from the specimen (e.g. tall tree, vine, shrub 3 feet tall, etc.)
- (5) the collection date
- (6) your name. Please also number each specimen with your collection number.

You will not be given any labeling points if any of the above information is not on your index card

Each time you turn in your collection, you must include a list of your specimens with collection numbers in numerical order. Keeping such a list as you collect will help you avoid duplications.

Grading:

9 field quizzes - 10 points each	90 points
midterm	100 points
final	100 points
collection	210 points

Final grades are based on points earned (500 total points).

Total points	Final grade
450-500 points	A
400-449 points	B
350-399 points	C
300-349 points	D
0-299 points	F

Family collection:

Students taking the course for graduate credit (533/533L) will be required to build an additional plant collection (20 specimens) from two families. Families must be selected by the fourth week of lab and must be approved by the instructor. Duplicate specimens from the student's general collection will not be allowed. Family collections are due along with general collection. Specimens will be worth 4 points each, 100 points total (2 points for genus, 2 points for family).

Final grades for 533/533L are based on points earned (600 total points).

Total points	Final grade
540-600 points	A
480-539 points	B
420-479 points	C
360-419 points	D
0-359 points	F