FIELD BOTANY
BIO 234
SPRING 2003
Dr. Eloise Carter

***Proposed* topics for discussion and lab**

		LECTURE/DISCUSSION	LAB/FIELD
Jan.	16	Should Dean Moon take Field Botany? How about me?	
	21	Trees on the Green B.Y.O.T.	Trees in Winter I: (Bring "Identification Of S.E. Trees in Winter")
	23	What's in a name? Variation and Taxonomy	
	28	The Eastern Deciduous Forest	Trees in Winter II: Hearn Forest and the Oxhouse
	30	Plants and Society (Ethnobotany)	
Feb.	4	Medicinal Plants: the Green Pharmacy	Bottomland hardwood Forest, Gum Creek
	6	Information Resources for Botany (Draw for dates) (meet in P206)	
	11	Bioprospecting for Medicinal Plants and Bioactive Drugs in Action Laboratory projects with reports at lab's end	
	13	**TREE QUIZ** Research Proposals due	
	18	What is a species? How do species originate?	Yellow River Ravine Forest
	20	The Origin of Talinum teretifolium	

**Note: This proposed schedule will change as weather, opportunity and interest suggest*.

	25	Sexual Encounters of the Floral Kind	The "key" to flowers and fruits – BYOF (Bring "Radford")
	27	"Help, I can't find a persimmon!"	
March	4	Early Spring flowers; collecting and identifying; Meet in Lab at 11:30 am	
	6	*****WINTER TREE EXAM*** Field Notebooks due in class.**	
	11-13	*****SPRING BREAK*****	
	18	Student Presentations: Plant Families	"Weeds" of field and lawn
	20	Student Presentations: Plant Families	
	25	Hazelbrand Farms and plant identification	Bring Radford Depart 11:30 am
	27	Student Presentations Plant Families	
April	1	Wesley Woods: Old growth Forests of Emory University	Depart 11:30 a.m.
	3	The Importance of Place: Plant families	
	8	Weeds – Invasive plants	The Urban Landscape
	10	Keying Plants	
	15	Endemism and rock outcrops	Granite Outcrops
	17	Field Trip Preview	
	19, 20	*****Weekend Field Trip*** North Georgia**	

22	Wetlands	Alcovy River Swamp
24	Final Preparations	
29	**Final Laboratory Exam: Plant Identification in lab with Radford**	
30	***Reading Day*** Which trees haven't you seen? The last walk!!	

Monday, May 5*FINAL TREE EXAM***(2 pm – 5pm) Field notebooks due.**

Texts: Preston, R.J., Jr., and V.G. Wright. 1985. *Identification of Southeastern Trees in Winter*. North Carolina Agricultural Extension Service. The only guide to trees in winter for this area. (**Required**)

Radford, A.E., H.E. Ahles and C.R. Bell. 1968. *Manual of the Vascular Flora of the Carolinas*. University of North Carolina Press. The most complete flora of the Southeast. Others will be available in lab. (**Required**)

Harrar, E.S. and J.G. Harrar. 1962. *Guide to Southern Trees*. Dover Press. This is an excellent guide to trees, but does not include shrubs. (optional)

Smith, J.P., Jr. 1977. *Vascular Plant Families*. Mad River Press. This book will be provided in the lab as a reference.

A FIELD GUIDE TO FIELD BOTANY

CLASS OBJECTIVES:

- to study in the field and laboratory the flora of southeastern plant communities;
- to investigate the medicinal uses of plants;
- to identify in the field 50+ woody plants in the winter condition;
- to identify in the field 100+ woody plants in the spring;
- to use a taxonomic key to identify local flora;
- to develop the observation and investigative skills to be keen observers of the natural world, *forever*.

CLASS PREPARATION: Students do not have readings from a textbook, but should expect to read articles for background information. Students should be prepared to ask questions and to participate in class and laboratory discussion. Students are responsible for *all* material in lab, field and lecture. Classroom material provides the background and instruction needed to be successful botanists in the laboratory and field. References and resources are provided in the laboratory. Use them!

WOODY PLANTS: Students will be able to identify approximately 50 woody plants in the winter condition before Spring Break and around 100 woody plants by the end of the semester. *Students are expected to take the initiative and responsibility for locating and identifying woody plants. The instructor is one of many resources available to students.*

FIELD NOTEBOOKS: Students will keep a notebook for field observations and notes. The purpose of a field notebook is to promote, reward, and evaluate good field observations and identification skills. Each entry in your Field Book **must include** *date, location and observers. This is followed by a general description of the site, including physical features, indications of disturbance, community type; notes on species of importance or interest; and notes on characters for identifications. All notes must be made in pencil in the field,* **with a *required* summary paragraph added later**. Notebooks will be collected and graded twice during the semester.

STUDENT PAPERS AND PRESENTATIONS: Each student will investigate a plant or group of plants which have medicinal properties. Each student will prepare a paper (approximately 10 pages) on the ethnobotany of their taxa. The papers are due on the day after their presentation. Students will select a portion of their work to present in a 15-20 minute presentation in class on March 18, 20, and 27. Look for an information sheet in the second week of class.

FIELD EQUIPMENT: Every student will need a hand lens for class and lab. These are available for purchase or loan. A pocket knife is not required, however I strongly recommend you purchase or borrow one for the semester. *Students should pick up a collecting bag and rubber band before going in the field.*

WEEKEND FIELD TRIP: All students are expected to attend the weekend field trip and should make plans in advance. The cost of the trip varies, but usually costs around $25.

HONOR CODE: All examinations and work for credit in this course come under the regulations of the Honor Code. Your signature on your work attests to your upholding the Honor Code.

OFFICE HOURS: Office: P105, 4-8343; Monday and Wednesday 11:45-12:30. *On Wednesday I will be in the library for office hours*. I am available to help at any time. For an appointment see me in class or come by my office.

ABSENCES: Don't be absent, you will miss too much. However, if emergencies or illness prevent attendance, please notify the instructor immediately. The Biology department policy on absences is available as a separate handout.

EVALUATIONS: Students will be evaluated on ethnobotany presentation and paper, field notebook, field exams on woody trees, weekly plant identifications, and a final laboratory identification of unknown flowering plants. Written examinations may be given in lecture. Class participation, contributions to laboratory and field work and the development of field skills also will be considered.

***Proposed* contributions to grade:**

Tree identification 30%
Weekly identification of flora 20%
Exam - identification of flora 20%
Field Notebook 15%
Paper and presentation 10%
Other class work 5%