

BIOL3610/5610 Botany

Fall Semester 2019

Instructor: Dr. Carter

Office: BC 1105 Herbarium: BC 1040

Telephone: (229) 333-5338

e-mail: Please use the mail tool in Blackboard

Office Hours: 3:00-4:00 PM, 10/10/19, 10/11/19, 10/12/19, 10/13/19, 10/14/19, 10/15/19, 10/16/19, 10/17/19, 10/18/19, 10/19/19, 10/20/19, 10/21/19, 10/22/19, 10/23/19, 10/24/19, 10/25/19, 10/26/19, 10/27/19, 10/28/19, 10/29/19, 10/30/19, 10/31/19

Miscellaneous Required Items

- x Pencils or pens for recording notes, etc.
- x Spiral bound notebook, convenient for field trips
- x 300 3X5 index cards for field quizzes
- x Handlens with lanyard

Additionally, the following are recommended.

- x Old clothes, including long pants, and sturdy shoes or boots for field trips
- x Rain gear and warm clothing as appropriate
- x Insect repellent for field trips
- x Immediately upon returning from field trips, students are urged to check their bodies thoroughly for

Lecture examinations Two lecture examinations will be given during the semester, one of these prior to midterm. Each of these exams accounts for 150 points in determining the overall course grade

Final examination. A comprehensive final examination will be given during the final examination period, which will comprise elements of both lecture and laboratory

Meeting the minimum point requirement for a letter grade does not necessarily assure that the student will receive that grade. Assignment of the final grade is the prerogative of the instructor and will be based upon each student's positive attitude as shown through attendance, participation, and cooperation.

Class conduct Students are expected to comport themselves courteously at all times during lecture and laboratory. Disruptive behavior will not be tolerated, and students behaving in a disruptive manner will be asked to relinquish their VSU student identification card and will be removed from class and referred to the Dean of Students for disciplinary action. Refer to the Student Code of Conduct, Appendix A in the Student Handbook. Consumption of food or drink (including water) and wearing of hats or caps is prohibited in the lecture room. Students should be punctual for all scheduled lecture and laboratory meetings, and, except in situations of emergency, students should not depart from lecture before being dismissed. Students are to direct their full attention to lecture and are to refrain from unwarranted discourse. Behavior contrary to these guidelines is disruptive. Disruptive behavior will result in deduction of points from final grade.

Use of cellular telephones, pagers, digital cameras, and other such communication devices. Use of cellular telephones, pagers, or any similar communication device or digital camera is prohibited during lecture, examinations, or quizzes, unless expressly authorized by instructor. If students bring cellular telephones or any other similar devices to lecture, it is their responsibility to switch them off prior to the beginning of the lecture period. Ringing, buzzing, or any other sounds emitted from such devices will be treated as disruptive behavior on the part of the owner/possessor, and the owner/possessor will be asked to leave lecture immediately.

located in Farber Hall. The phone numbers are 229-524-2498 (V) and 229-375-5871 (VP). For more information, please contact the instructor.

Student Opinion of Instruction (SOI) At the end of the term, students are expected to complete an online SOI survey through SmartEvals. Students will receive email notification through their VSU email addresses when the SOI is available, generally at least one week before the end of the term. SOI responses are anonymous, and instructors and administrators will be able to access the results only after grades have been submitted. Students who withdraw or drop a course will also be sent invitations to complete the Dropped Course Survey. Complete information about the SOIs, including how to access the survey, is available on the [SOI Procedure webpage](#).

Supplemental Reading

For current information on classification of angiosperm plant families

Stevens, P. F. (2001 onwards). Angiosperm Phylogeny Website. Version 9, June 2008 [and more or less continuously updated since]. <http://www.mobot.org/MOBOT/research/APweb/> (Accessed March 11, 2012)

For plant community classification

Barbour, M.T., M.G. and N.L. Christensen. 1999. Vegetation, pp. 97-131 in: Morin, N.R. (Ed.) Flora of North America Vol. 1. Oxford University Press. New York.

Description of the Ecoregions of the United States compiled by R.G. Bailey, U.S. Forest Service. March 1995. <http://www.fs.fed.us/land/ecosysmgmt/index.html> (Accessed: March 11, 2012)

Ecological Subregions of the United States compiled by McNab, W.H. and P.E. Avers. U.S. Forest Service. WSAO 5. July 1994. <http://www.fs.fed.us/land/pubs/ecoregions/> (Accessed: March 11, 2012)

Ecoregions, Nearctic. World Wildlife Fund. 250 Twenty-Fourth Street, N.W., P.O. Box 97180, Washington, DC 20090-7180. http://www.worldwildlife.org/wildworld/profiles/terrestrial_na.html (Accessed: March 11, 2012)

NatureServe. 201

Tentative Course Outline with * Laboratory Schedule

Week of Aug 19

Classes begin Mon, Aug 19

Lecture:

Introduction to Course

What is a tree? What is a forest?

Overview of the Classification of Plants

* Botany Laboratory: Development and Structure of the Woody Plant Body

Week of Aug 26

What is a tree? What is a forest?

Overview of the Classification of Plants

* Botany Laboratory: Reproduction in Pine and Oak

Week of Sep 2

Labor Day Holiday Mon, Sept 2

Diversity of Trees

Gymnosperms

GINKGO

x Ginkgoales: Ginkgoaceae: Ginkgo: ginkgo

CONIFERS

x Pinales: Cupressaceae, Pinaceae, Taxaceae: Chamaecyparis, Juniperus, Taxodium; Abies, Pinus, Picea, Tsuga; Taxus, Torreya: white cedars, junipers, baldcypresses; firs, pines, spruces, hemlocks; yews, gopherwood

* Alternative Assessment: Using the Valdosta State University Virtual Herbarium [VSUJH] to review basic vegetative structure of trees

Week of Sep 9

Lecture: Diversity of Trees

Angiosperms

ANAGRADE

x Austrobaileyales: Schisandraceae [incl. Illiciaceae]: Illicium: Florida anise

MAGNOLIIDS

x Magnoliales, Laurales: Magnoliaceae, Annonaceae; Lauraceae, Calycanthaceae: Liriodendron, Magnolia; Asimina; Persea, Sassafras, Litsea; Calycanthaceae: magnolias, yellow poplar; pawpaws; redbay, swampbay, sassafras, pondspice; sweetshrub

MONOCOTS

x Arecales: Arecaceae: Sabal: cabbage palm

* Field Laboratory: Identification of Trees and Plant Communities

Week of Sep 16

Lecture: Diversity of Trees

EUDICOTS

x Proteales, Saxifragales: Platanaceae; Hamamelidaceae, Altingiaceae: Platanus; Hamamelis, Liquidambar: sycamore; witch hazel, sweetgum

x Malpighiales: Euphorbiaceae, Salicaceae, Rhizophoraceae: Triadica; Populus, Salix; Rhizophora: Chinese tallow; willows, cottonwoods; red mangrove

x Fabales: Fabaceae: Acacia, Albizia, Robinia, Gleditsia, Cercis: acacias, mimosas, locusts, redbud

* Field Laboratory: Identification of Trees and Plant Communities

Week of Sep 23

Lecture: Diversity of Trees

x Rosales: Rosaceae, Rhamnaceae, Ulmaceae, Celtidaceae, Moraceae: Amelanchier, Crataegus, Malus, Prunus; Rhamnus; Planera, Ulmus; Celtis; Broussonetia, Morus: serviceberries, hawthorns, crabapples, plums, cherries; Carolina buckthorn; elms; hackberries; mulberries

* Field Laboratory: Identification of Trees and Plant Communities

Week of Sep 30

Lecture: Diversity of Trees

x Fagales: Fagaceae: Castanea, Fagus, Quercus: chestnuts, chinkapins, beeches, oaks

x Fagales (continued): Betulaceae, Myricaceae, Juglandaceae: Alnus, Betula; Morella, Myrica; Carya, Juglans: alder, birches; bayberries; hickories, walnuts

* Field Laboratory: Identification of Trees and Plant Communities

Week of Oct 7

Fall Break Mon Tues, Oct 7-8

Lecture: Diversity of Trees

- x Cornales: Hydrangeaceae, Cornaceae: Philadelphia; Cornus, Nyssa; orange; dogwoods, gums
- x Ericales: Sapotaceae, Theaceae, Ericaceae, Ebenaceae, Cyrillaceae, Styracaceae, Symplocaceae: Sideroxylon; Gordonia, Stewartia; Elliottia, Kalmia, Lyonia, Oxydendrum; Diospyros; Cliftonia, Cyrilla; Halesia, Styra; Symplocobuckthorns; loblolly bay, silky camellia; mountain laurel, lyonias, sourwood; persimmon; titis; silverbells, storaxes; sweetleaf

Midterm date Thurs, Oct 10

*Field Laboratory: Identification of Trees and Plant Communities

Week of Oct 14

Lecture: Diversity of Trees

- x Myrtales: Combretaceae: Combretum, Laguncularia; buttonwood, white mangrove
- x Malvales: Malvaceae: Ficus; basswoods
- x Sapindales: Rutaceae, Meliaceae, Anacardiaceae, Sapindaceae: Runcirus, Ptelea, Zanthoxylum; Melia; Rhus, Metopium, Schinus, Toxicodendron; Acer, Aesculus, Sapindus: mockorange, wafer ash, prickly ashes; Chinaberry; sumacs, poisonwood, Brazilian pepper; maples, buckeyes, soapberry

*Field Laboratory: Identification of Trees and Plant Communities

Week of Oct 21

Lecture: Diversity of Trees

- x Gentianales: Rubiaceae: Cephalanthus, Pinckneya; buttonbush, feverbark
- x Lamiales: Oleaceae, Bignoniaceae, Avicenniaceae: Chionanthus, Fraxinus, Ligustrum, Osmanthus; Catalpa; Avicennia: graybeard, ashes, ligustrums, wild olive; catalpas; black mangrove

*Field Laboratory: Identification of Trees and Plant Communities

Week of Oct 28

Lecture: Diversity of Trees

- x Aquifoliales: Aquifoliaceae: hollies
- x Apiales: Apiaceae: Aralia: [unclear] [unclear] [unclear] [unclear]
- x Dipsacales: Adoxaceae: Sambucus, Viburnum: elderberries, viburnums

*Field Laboratory: Identification of Trees and Plant Communities

Week of Nov 4

Lecture:

- x Biogeography of Trees
- x Abscission and Changing Leaf Color

*Field Laboratory: Identification of Trees and Plant Communities

Week of Nov 11

Lecture: Introduction to Forest Ecology

BIOL3610/5610 Dendrology Field Trip and Laboratory Schedule Fall 2019

Fri, ~~08/23~~/2019 11:00AM 1:50 PM Botany Lab (BC 2040)

Fri, ~~08/30~~/2019 Alternative assessment VSU Virtual Herbarium

Fri, ~~09/06~~/2019 11:00 AM 1:50 PM: Botany Lab (BC)2040

Fri, ~~09/13~~/2019 11:00AM 1:50 PM/SU Campus

Fri, ~~09/20~~/2019 10:00AM 1:50 PM Lake Louise Field Station (LLFS), Lowndes Co., GA

Fri, ~~09/27~~/2019 10:00AM 5:00 PM Greenwood Plantation, Lost Creek, Thomas Co., GA

Fri, ~~10/04~~/2019 10:00AM

PM Highlands Biological Station, Highlands, NC

Fri, ~~10/18~~/2019 10:00AM 1:50 PM Grand Bay WMA, Lowndes Co., GA

Fri, ~~10/25~~/2019 10:00AM 1:50 PM vic. Snake Nation Rd, Lowndes Co., GA

Fri, ~~11/01~~/2019 10:00AM 1:50 PM Little River Hwy GA 133 Public Boat Launch, W Valdosta, Lowndes Co., GA

Fri, ~~11/08~~/2019 10:00AM 1:50 PM LLFS, Lowndes Co., GA ~~Bot~~ Botany Lab (BC 2040)

Sat., ~~11/09~~/2019 8:00AM 9:00 PM: Torreya State Park, vic. Chattahoochee, FL

Fri, ~~11/15~~/2019 10:00AM 1:50 PM LLFS, Lowndes Co., GA [alt. Botany Lab (BC 2040)]

Fri., ~~11/22~~/2019 10:00 AM 1:50 PM: LLFS, Lowndes Co., GA [alt. Botany Lab (BC 2040)]

Fri., ~~12/06~~/2019 10:00 AM 1:50 PM: LLFS, Lowndes Co., GA [alt. Botany Lab (BC 2040)]

8/16/2019