

FORS 4010 Silviculture

Time:**Class:** M,W,F: 10:10-11:00**Lab:** W: 1:25-6:35**Term:** Fall 2005**Place:** WSFR 1-304**Instructor:** Prof. Richard F. Daniels**Office:** WSFR 4-506**email:** ddaniels@uga.edu**Phone:** 542-7298 (Office)

424-1031 (Mobile)

783-4258 (Home)

Hours: M,W,F: 11-12, T,Th,F: 2-4

(Appointment recommended)

Teaching Assistant: Seth Freeman**Office:** WSFR 1-301**email:** sdf3359@owl.forestry.uga.edu**Phone:** (229) 567-7589 (Mobile)**Hours:** Mornings (call)**Course prerequisites:** Dendrology, Ecology, FORS 3000**Textbook:**

Nyland, R.D. 2002. *Silviculture: concepts and applications*. 2nd Edition. McGraw-Hill.
Boston, MA. ISBN 0-07-366190-2, 682 p.

Network Site:

Flukes on Redhorse L:\class\FORS4010

Course Objective: To develop an understanding of the fundamentals of silviculture and its role in resource management. Topics covered will include history of land use, forest establishment and growth, intermediate treatments, regeneration systems, forest health and protection, fire, timber and non-timber outputs. We will study examples representative of southeastern silviculture to reinforce principles and practices.

Grading:

Midterm I	20%
Midterm II	20%
Final Exam	25%
Quizzes and Assignments	10%
Laboratory	25%

Grade Scale:

A = 90- 100%
B = 80 - 89%
C = 70 - 79%
D = 60 - 69%
F = <60%

Do not count on any final or within-semester adjustments to grades. You are expected to attend lecture and laboratory sessions on a consistent and timely basis. Failure to do so may significantly negatively impact your performance and, therefore, your grade.

Topical Outline and Tentative Lecture Schedule

Week 1 (August 19)

Introduction

Week 2

History of the Southern Forest, Species-Site Relationships
Stand Structure and Development,

Week 3

Density and Stocking
Introduction to Silvicultural Systems

Week 4

Even-aged Systems – Clearcut Method

Week 5

Artificial Regeneration - Nursery and Greenhouse Operations

Week 6

Plantation Management - Site Preparation, planting, weed control, fertilizing
1st Exam (Sept 23)

Week 7

Intensive Management

Week 8

Even-aged Systems – Seed Tree Method, Shelterwood Method

Week 9

Silviculture and Water Resources

Week 10

Silviculture and Biodiversity
2nd Exam (Oct 21)

Week 11

Uneven-aged Systems – Single Tree Selection, Group Selection

Week 12

Thinning, Tree Quality, Wood Quality

Week 13

Improvement, Sanitation, Salvage Cuttings, Release Cuttings

Week 14

Forest Protection, Prescribed Fire, Pinestraw Management

Week 15

Agroforestry

Week 16

Wildlife and Recreation (recap)

Final Exam: Friday Dec 16, 8:00 am

Policies:

- Reading assignments must be completed prior to the class meeting during which they will be discussed. Class participation will be assessed based on attendance and discussion of reading assignments.
- The subject will be built in a cumulative manner. Quizzes and exams will be on current material, but this material may rely on knowledge from prior sections. The final exam will be comprehensive and cumulative: if a topic has been covered in the course, you may expect a question on that topic on the final exam.
- Except for cases of serious personal illness or emergency (requiring written verification), make-up tests and quizzes must be arranged in advance.
- Assignments are due to the TA by 5:00 pm on the date due. Late work will not be accepted.
- The course outline given below provides a general schedule for the course; deviations may be necessary.
- The textbook readings will be supplemented by handouts and library assignments.

Tentative Laboratory Schedule

Aug 25	Forest cover types, typemapping -- Whitehall
Aug 31	B. F. Grant – Density and Yield
Sept 7	Begin Silvicultural Prescription Exercise -- Whitehall
Sept 14	Nursery/Greenhouse Practices; Planting -- Whitehall
Sept 21	Site Preparation -- TBA
Sept 28	Savannah River Site
Oct 5	Options for Small Landowners – Oglethorpe/Greene County
Oct 12	Coweeta Hydrologic Lab – Silviculture and Water Quality
Oct 19	Bottomlands -- Hitchatee Experimental Forest
Oct 26	Work on Silvicultural Prescription Exercise /Reforestation
Nov 2	Hardwood Silviculture;
Nov 9	Thinning and Pruning, Intensive Silviculture
Nov 16	Regeneration (Un)Even-aged Mgt., Intermediate Treatments
Nov 23	No lab -- Thanksgiving
Nov 30	Fire
Dec 7	Field Reports on Silvicultural Prescription Project

Laboratory Exercises and Field Trips

1. Labs will meet regardless of prevailing weather conditions, with the exception that we will not stay out in lightning storms. Come to lab dressed for the field. Open shoes or sandals are not permitted, shorts are at your own risk.
2. Attendance at every lab exercise is mandatory. Your absence from a lab exercise will result in an F for the assignment or session. See me or the TA if you have an emergency resulting in your absence.
3. Unless otherwise specified, lab reports are due by 5 p.m. one week from the day of your lab period. No late reports will be accepted. All labs should be given to the TA as a printed, written document, unless you are notified otherwise.
4. The quantitative summaries of laboratory data will be completed by the entire lab crew. You will each need to know how to do calculations for exams, so failure to participate in working up the data is at your own peril. Note: Do not use any more digits in your answers than are significant.
5. Questions to laboratory exercises will be answered individually, with all answers typed.
6. Use proper grammar, sentence structure and spelling in your reports.
7. For safety reasons, there will be no smoking during any lab. No exceptions.
8. You are collectively responsible for all equipment used during lab, so treat it accordingly. Please inform me of any breakage ASAP.
9. Do not break off, pull up, trample or otherwise molest the vegetation you encounter in the field. Likewise for wildlife and fellow students.

FORS 4010/4010L**Statement on Academic Honesty**

You should have received the University of Georgia booklet entitled “A Culture of Honesty” upon entering the university, and you are expected to be familiar with the policies regarding academic honesty contained therein. With respect to FRS 4010 and 4010L, you are also expected to:

1. Adhere completely to the standards set forth in “A Culture of Honesty” in all of your work.
2. Complete class assignments and examinations on an individual basis without assistance from any other persons, or from sources not explicitly authorized by the instructor. Exceptions to this policy are allowed only for summarizing lab data or as may specified by the instructor.
3. To properly and accurately cite all sources used in your assignments in accordance with accepted academic standards. You should inquire of the instructor if there is any uncertainty on your part.
4. Report known or suspected cases of academic dishonesty immediately, or as soon as is otherwise possible, to the instructor or teaching assistant. You may also file a formal written charge with the Office of the Vice President for Academic Affairs (OVPAA) in accordance with the policies set forth in “A Culture of Honesty”.

Failure to adhere to the policies set forth here or in “A Culture of Honesty” will result in the mandatory initiation of academic dishonesty proceedings against you. University of Georgia faculty and teaching assistants are required to report all known or suspected instances of academic dishonesty to the OVPAA, and do not have the authority to adjudicate cases outside of the OVPAA.