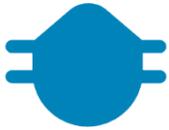


Silviculture FOR3162C/6164

Important Information

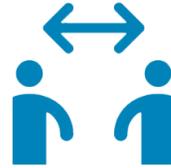
This course includes face-to-face sessions. During all face-to-face activities, the following public health and safety protocols are recommended of all students, instructors, and teaching assistants:



Bring and wear a face mask indoors at all times.



Wash hands (>20 sec) before and during class.



Maintain responsible physical distancing at six feet.



If you feel sick or have symptoms, stay home.

Stay informed of current Covid-19 [policies](#). If you are experiencing [COVID-19 symptoms](#) please use the UF Health screening system and follow the instructions on [whether you should attend class](#). Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.

1 Course Overview

Course description:

This course covers the theories and practices that pertain to managing for forest establishment (natural and artificial regeneration), composition, structure and growth. The principles of sustainable forest management will be covered for a broad array of ecosystem values and social and ecological benefits, including forest products, ecological restoration, wildlife, biodiversity, and ecosystem services. In aggregate, these topics broadly cover the art and science of silviculture.

The course has a lecture and laboratory component. The lectures have a traditional powerpoint structure with classroom discussion of readings and online material. When online materials are available for review it will be announced in class. The laboratories occasionally have scheduled computer work, and field trips to meet with forestry professionals but these may adjusted due to illness. Student presentations will be assigned both for the lab and the class periods.

- 4 Credits 3162c / 3 Credits 6164
- Spring 2022
- Format blended/hybrid for 3162c / asynchronous online for 6164c
- Location(s) for 3162C / 6164 is online
 - M 11:45 AM-12:35 PM

- We will meet at Austin Cary on these days. Field meetings will run into lab time and we will return early. Bring a lunch and water or eat beforehand.
- W 11:45-12:35 pm
 - 5th period, PSY0129
- F 11:45 AM-12:35 PM
 - 5th period, NZH0219 or online
- Laboratory Monday 6-9th periods (12:50-4:55 PM) **see schedule below**

Course Prerequisites: FOR 3153C or PCB 3043, FNR 3131C or Instructor Approval for 3162C; FOR6164 online: an ecology course or permission of instructor

Instructor: Jason Vogel

- Please email directly to me (avoid Canvas) at jvogel@ufl.edu.
- Office hours: by appointment virtual (Zoom) office hours or in person if necessary.

Co-instructor or Teaching Assistant: Sairandhri Lapalikar

- Please use the Canvas message/Inbox feature for fastest response.
- Office hours: available by email or phone; office visits available by appointment.

Textbook(s) and/or readings: [option: There is no required text for the course. Online readings will be provided for each learning topic.] [Sample or full readings list must be provided.]

Textbook(s) and/or readings: None required but the below are recommended.

The Practice of Silviculture: Applied Forest Ecology (9th Ed.) D.M. Smith, B.C. Larson, M.J. Kelty, and P.M.S. Ashton. 1997. John Wiley, 537 p. ***This book is recommended for those looking to become professional forest managers and is a great resource for this class. Suggested chapters are noted in the syllabus, but these are not required.***

Forest Stand Dynamics. Chadwick and Oliver. 1996. McGraw Hill.

Silviculture: Concepts and Applications. R.D. Nyland. 1996 or 2016. McGraw Hill 633 p.

Free, useful material

Burns R.M. and B. H. Honkala. 1990. Silvics of North America. U.S.D.A. Forest Service, Agric. Hdbk. 654.

AVAILABLE ON WEB

The Silvics of North America http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm

Examples of silviculture in Minnesota: <https://silvlib.cfans.umn.edu/>

We are building a similar example library here at UF.

2 Learning Outcomes

At the end of this course, students will be able to:

1. Design silvicultural applications for sustaining forest ecosystem goods and services.
 - a. Compare and contrast forest stand management options for different landowner objectives.
 - b. Describe appropriate uses of fire, mechanical, and chemical methods in forestry and their environmental consequences.
 - c. Ability to contrast methods of ensuring tree regeneration, guiding stand development, and using appropriate harvesting methods based on landowner objectives.
2. Demonstrate an ability to acquire, interpret, and present conclusions about silvicultural approaches both orally and in writing.
 - a. Prepare a written/oral paper or report.
3. Apply basic concepts in statistics and sampling methods to develop sampling designs and collect, analyze, and interpret natural resources inventory and monitoring data.
 - a. Collect, analyze, and interpret forest resource data.
4. Demonstrate environmental stewardship and professional and ethical behavior.
Identify practices that adhere to ethical and professional standards of forestry.

3 Course Logistics

Students may access lectures, assignments, readings, and supporting materials through the course Canvas site as they become available.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)
- Installation of proctoring software may be required and will be provided if so.

Synchronous online sessions may be recorded. By sharing your video, screen, or audio during any synchronous online class sessions, you are consenting to being recorded for the benefit of students who cannot attend live as well as for class review during the current semester. If you have special circumstances or concerns about privacy, it is your responsibility to discuss it with your instructor.

3.1 Description of Assessments & Activities

- 1) **Participation, syllabus quiz, and group work plan (25 pts).** Attend Friday zoom meeting and watch the online lectures (I can check this). Two Friday meetings can be missed during the semester. After two, I would like an update as to why you missed the assigned time.
- 2) **Describe a forest (45 pts).** This will involve you describing a forest iteratively over a semester, adding details that I will assign and describe to you. Ideally, you know the forest well-enough or can access it so that you can add the details that I will request at each iteration. (3x at 15 pts).
- 3) **Quizzes (250 pts).** Individually graded. There will be 12 written and 12 oral quizzes over the semester. Two of each can be missed or dropped if they are low with no penalty (so only 10 will be counted toward your grade). After these two, we will need to talk about how to make up the work.

Written Quiz: (20 pts per quiz x 10 quizzes). Do as an individual online. These will mostly derive from the week's lectures and lab.

Oral Quiz. (5 pts per quiz x 10 quizzes) Every Friday during an assigned time, either I or the TA Sai will meet with groups of four students for a quiz. I will give you the questions that you need to answer beforehand. We will never play 'gotch ya' or try to embarrass anyone. You can work on these as a group but you are responsible for knowing the correct answer to every question. Meaning, do not get upset if your partners steer you wrong on a question.

4) **Laboratory reports (200 pts or 50 pts each / four reports).** Each of you will be assigned a section of a lab report to do. This individual work will be 80% of your grade, 10% will come from your group's assessment of your help in pulling together the whole report and 10% will be on the overall report. **The 10% assessment on group work cannot decrease your grade. So if your individual work and peer assessment was an 'A' you will receive an 'A' for that assignment regardless of what your peers had done on the rest of the assignment.**

5) **Development of silvicultural prescription (125 pts)** and an in-person or zoom presentation of silvicultural prescriptions (**80 pts**). The prescription is individually graded by section and the presentation is a combined individual and team graded exercise. **But similar to the above, any group grades cannot lower your grade.** Note that part of your grade will be your participation and grading of other's work, and the grade you receive from your teammates.

To receive your final grade on the silvicultural prescription, your group must answer the questions posed to you during the oral presentations and in your text.

6) **Graduate students** will form their own group(s) and develop a silvicultural prescription focused on a forest ecosystem or management type that is relevant to their interests. You will not need to show up for field labs as I will give you the data and information to complete the work. There will be additional readings and a more extensive prescription expected. Presentations of the silvicultural prescription will occur online.

7) **No "extra" extra credit** will be assigned to individuals. Extra credit during the semester will only be made available to the entire class.

3.2 Grades & Grading Scale

For information on current UF policies for assigning grade points, see Ugrad <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>
 Grad <https://catalog.ufl.edu/graduate/regulations/#text>

Grading Scale (%)
 A 90-100
 B+ 85-89.99
 B 80-84.99
 C+ 75-79.99
 C 70-74.99
 D+ 65-69.99
 D 60-64.99
 E < 60

Points and percentages for each class activity		
Activity	Points	Percentage
Participation	25	3.4
Describe a forest	45	6.2
Quizzes		
Oral*	50	6.8
Online*	200	27.0
Laboratory Exercises		
1. Stand Struct. & Comp.	50	6.8
2. Site Qual. Eval.	50	6.8
3. Thinning	50	6.8
4. Regeneration	50	6.8
Silvicultural Prescription		
Report	125	17
Presentation	80	11
Total points	725	

4 Learning Content

The field laboratories are critical learning experiences for this course. The majority of the field laboratory exercises held will occur at the Austin Cary Forest. Read each laboratory exercise prior coming to the field class, or if working online, before the following week discussion. Note: The procedures for all laboratory exercises will be located on the silviculture course Canvas page.

You will also be responsible to come prepared for the elements, which includes: wearing long pants and boots, and bringing rain gear when appropriate. **For your protection, hard hats and safety vests will be worn during all field exercises. Snake leggings or your personal ‘snake’ boots are highly recommended.** Equipment will be assigned at the beginning of the semester to each person, and to lab

groups at the beginning of each class. **Lightning or high-winds will cause us to cancel a trip, but light rain or cold, and we will still go out.**

Laboratory Schedule. Note there will need to be some flexibility around field trips dates because of weather or our cooperators' availability.			
Date	Topic	Location	Week
10-Jan	Description of stand structure / Composition	Austin Cary Forest (ACF)	2
17-Jan	No lab—MLK Day	---	3
24-Jan	Discuss stand structure / Composition lab	ACF	4
31-Jan	Site Productivity Lab	ACF	5
7-Feb	Discuss Site Productivity Lab	ACF or Online Zoom	6
14-Feb	Potential field trip		7
21-Feb	Thinning Lab Introduction	ACF	8
28-Feb	Discuss Thinning Lab	ACF or Online Zoom	9
7-Mar	Spring break	Somewhere fun!	10
14-Mar	Regeneration Lab	ACF	11
21-Mar	Understory / overstory management	ACF	12
28-Mar	Discuss regeneration and overstory	ACF	13
3-4th-Apr	Field trip to Jones Center		14
11-Apr	Discussion on upcoming prescription/presentation	Zoom or in person	15
18-Apr	Silvicultural Prescription Zoom or In-person Presentation	Online or in-person	16

Finals / Reading Days (there is no final in the class)

Lab	Tentative Due Dates
Stand Structure and Composition	Jan. 31st
Site Productivity Evaluation	Feb. 14th
Thinning Lab	Mar. 4th
Regeneration Lab	Mar. 24th
Silvicultural Prescription Report	Apr. 25th

Dates may need to be adjusted because of weather or illness.

4.1 Readings

These will be available within each weekly module. The recommended supporting material above is not included.

5 Policies and Requirements

This course plan and syllabus are subject to change in response to student and instructor needs. Any changes will be clearly communicated in advance through Canvas.

5.1 Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues **MUST** be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

5.2 Communication Courtesy and Professionalism

Just as in any professional environment, meaningful and constructive dialogue is expected in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view.

Respect for individual differences and alternative viewpoints will be maintained in this class at all times. All members of the class are expected to follow rules of common courtesy, decency, and civility in all interactions. Failure to do so will not be tolerated and may result in loss of participation points and/or referral to the Dean of Students' Office.

5.3 Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

At the end of the semester, students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

5.4 Academic Honesty Policy

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."*

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct or appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:

<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

5.5 Inclusive Learning Environment

This course embraces the University of Florida's Non-Discrimination Policy, which reads,

The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act.

If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see the instructor or refer to the Office of Multicultural & Diversity Affairs website:

<http://multicultural.ufl.edu>.

5.6 Services for Students with Disabilities:

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. 0001 Reid Hall, 352-392-8565, <http://www.disability.ufl.edu>

5.7 Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal

penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

6 Campus Helping Resources

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFFGS Academic Hub <https://ufl.instructure.com/courses/303721>

6.1 Student Life, Wellness, and Counseling Help

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- Counseling and Wellness resources <http://www.counseling.ufl.edu/cwc/>
- U Matter, We Care <http://www.umatter.ufl.edu/>
- Career Connections Center <http://career.ufl.edu/>
- Other resources are available at <http://www.distance.ufl.edu/getting-help> for online students.

6.2 Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered. You can also [submit feedback anytime](#).

If you have a more urgent concern, your first point of contact should be the Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- Students in online courses: <https://distance.ufl.edu/getting-help/>
- Students in face-to-face courses: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>