

**FORESTRY FO 4223/6223
PRACTICE OF SILVICULTURE
SPRING SEMESTER 2012**

INSTRUCTOR: Dr. Brent R. Frey

CLASSROOM: a208 Thompson Hall
LECTURE: Monday, Wednesday, Friday 8:00 AM-8:50 AM

OFFICE: 345 Thompson Hall
OFFICE PHONE: 662-325-2775
OFFICE E-MAIL: bfrey@cfr.msstate.edu
OFFICE HOURS: Monday, Tuesday, and Wednesday 9:00AM-11:00 AM
or by appointment.

Teaching assistant: Ellen Boerger

Prerequisites: FO 4213/6213 (or WF3133 & WF4223)
Co-requisite: FO 4221/6221 (Practice of Silviculture Lab)

Course Description (Mississippi State University Bulletin):

Manipulation to obtain desired reproduction and to maintain optimum development under given forest land management objectives (LECTURE).

Application of silviculture practices and operations under given forest management objectives (LAB)

Objectives:

1. To develop an understanding of the cultural practices used in tending forest stands, including implications for both timber and non-timber resources.
2. To be able to identify and explain technical aspects of silvicultural methods aimed at regeneration, density management, and control of competition.

Required Textbook, Readings, and Other Materials:

Smith, DM, Larson, BC, Kelty, MJ, and Ashton, MS. 1997. The practice of silviculture: applied forest ecology. 9th Edition. John Wiley and Sons, New York 537pp.

Periodically, handouts and readings will be given to the class. PowerPoint presentations will be used to illustrate and expand upon the classroom lecture notes. Students will be responsible for this material. Materials will be posted to MyCourses site.

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Major Topics:

- Basic stand growth and development
- Site preparation
- Production of planting stock
- Methods and effects of thinning
- Methods and effects of stand improvement
- Methods of regenerating new stands
- Silviculture of mixed species stands

Evaluation Criteria:**

Weekly quizzes (20%), midterm exams (50%), and final exam (30%).

Grade Scale:

A	90-100
B	80-89
C	70-79
D	60-69
F	59 or below

Examinations:

A quiz will be given each week. Unexcused missed quizzes cannot be made up. At the end of the semester the 3 lowest quiz scores will be dropped.

Midterm and Final Exams will primarily consist of short answer essays and multiple-choice questions.

Exam I	February 15, 2012
Exam II	March 26, 2012
Exam III	April 25, 2012
Final Exam (comprehensive)	May 4, 2012 (8-11am)

****Graduate students** enrolled in the course will be expected to develop an annotated bibliography on a subject to be determined in consultation with the professor. Every two weeks, starting with week 3, a minimum of 5 annotated references must be turned in to the professor.

Weighting of points for the final grade of graduate students:

Weekly quizzes (15%), midterm exams (45%), annotated bibliography (15%), final exam (25%)

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Professional Expectations:

Please read and follow the advice given in the “*Professional Expectations for Students in the Forestry Program*” document provided on the first day of class.

Academic Misconduct:

Violations of the academic honesty code will be dealt with in the strictest terms. Students are advised to become familiar with the University’s academic honesty code. The Honor Code reads as:

“As a Mississippi State University student I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those that do.”

Policies and procedures for handling academic misconduct as outlined under University Policies Relating to Students can be found at Internet Web site address http://www.msstate.edu/web/security/student_policies.html and will be followed in this course. Students are responsible for reading all materials (including that contained in the Attachments; e.g., Honor Code 12.07) within this Web site relating to academic misconduct. It is the student’s responsibility to ensure that both the *letter* and the *intent* of this code are met in all circumstances. Ignorance of this code will not provide a refuge from the consequences of misconduct. In addition the seal and pledge below will appear on all exams and students are expected to sign it.



“On my honor, as a Mississippi State Student,
I have neither given nor received unauthorized
assistance on this academic work.”

Student Signature

Attendance Policy:

Lectures-There will be no attendance monitoring unless otherwise noted. However, lectures may contain material not covered in the textbook. Students are expected to

attend classes unless prevented by circumstances beyond their control. Regardless of the reason for the absence, students are responsible for all material assigned and covered during their absence.

Exams-In case of illness, accident, or emergency, please notify the course instructor ***prior*** to the absence for an exam. Make-up exams will only be scheduled for absences authorized by the instructor. Exams can be made-up with a doctor's excuse (for illness at the time of the exam); death in the family; job interview that can not be rescheduled; or a field trip for another class. All excuses will be subject to verification. Arrangements for make-ups must be made at least one week in advance. All make-up exams will be essay in nature. **Missing an exam without proper notification and/or signed verification will result in a grade of zero in the exam, including the final exam (no exceptions).**

Basic class conduct (refer to Professional Expectations policy document):

Cell phone use is not permitted in the classroom. As a courtesy, please turn off your cell phones, or leave on vibrate, upon entering the classroom for lecture or when taking an exam.

No hats are to be worn in class. No tobacco will be used either.

University policy on academic misconduct will be enforced. Persons found cheating will receive no credit for the given exam or quiz, and be referred to the University's Dean of Students.

University policy on class attendance is the basis for participation in this class.

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Course Schedule

<u>Date</u>	<u>Topic</u>	<u>Textbook Chapter</u>
INTRODUCTION		
1/9	Introduction	1
1/11	Stand dynamics	2
1/13	Silvicultural systems	11
1/16	MARTIN LUTHER KING HOLIDAY	
1/18	Ecology of regeneration	7
STAND ESTABLISHMENT		
1/20	Site preparation - overview	8
1/23	Site preparation - mechanical	8
1/25	Site preparation - prescribed burning	8
1/27	Site preparation - chemical	8
1/30	Site preparation - chemical	8
PRODUCTION OF SEED & PLANTING STOCK		
2/1	Genetic improvement	9
2/3	Seed collection and handling	10
2/6	Nursery operations	10
2/8	Plantation establishment	10
2/10	Planting	10
2/13	Direct seeding	10
2/15	EXAM 1	
INTERMEDIATE STAND TREATMENTS		
2/17	Stand growth and development	2
2/20	Growth-growing stock relations	4

2/22	Thinning - introduction	3&4
2/24	Methods of thinning	5
2/27	Methods of thinning	5
2/29	Methods of thinning	5
3/2	Timber stand improvement	6
3/5	Timber stand improvement	6
3/7	Salvage	19
3/9	Pruning	3
3/11	SPRING BREAK	
3/19	Methods of TSI	6
3/21	Nutrition management	8
3/23	Nutrition management	8
3/26	EXAM 2	
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NATURAL REGENERATION METHODS		
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3/28	Clearcutting	12
3/30	Clearcutting	12
4/2	Seed tree	14
4/4	Seed tree	14
4/6	SPRING HOLIDAY	
4/9	Shelterwood	14
4/11	Shelterwood	14
4/13	Vegetative	13
4/16	Selection	15
4/18	Selection	15
4/20	Mixed species	16
4/23	Mixed species	16
4/25	EXAM 3	

5/4 ** FINAL EXAM Friday, May 4, 2012, 8:00 to 11:00AM **