

COURSE SYLLABUS

GENERAL INFORMATION

Fall Semester

Course Title and Number:

Silviculture - Forestry 229

Required Text(s) and
Laboratory Manuals:

The Practice of Silviculture,
David Smith, 9th edition.,
NED version 1.1

Instructor:

Prof. John Jastrzembski , Associate Professor of Forestry
jjastrzembski@allegany.edu

Office Location/Hours:

T-128: Monday 9:00 - 10:00 a.m.
Friday 9:00-11:00 a.m.

Day and Time of Class
Meetings:

Lecture: Mon&Fri 11:00 - 11:50a.m.
Lab: Wed. 10:00 - 5:00 p.m.

Phone Numbers:

Office: 301-784-5309
E-Mail: jjastrzembski@allegany.edu

Note: Material sequence may be altered if there is inclement weather or for guest speaker scheduling.

I. Purpose

- A. This course will include an introduction to climate, soils, and biotic factors affecting the composition and growth of forest stands; development of trees and stands with respect of height, diameter, volume, growth, reproduction; health of forest stands and sustainable maintenance of forest ecosystems. Students will investigate the importance of silvicultural practices of weeding, improvement cuttings, thinning, pruning, and reproduction; marking of stands prior to logging or forest health maintenance. Students will learn the basic principles of forest nursery management, reforestation and afforestation. Silvicultural Systems and their role as a tool for sustainable ecosystem management will be covered. This is a four semester hour class with two hours of lecture and six hours of lab each week.
- B. This course is designed to familiarize Forest Technology students with the field of silviculture and forest management as it pertains to managing, tending and nurturing woodlands for long-term forest health, social needs. Emphasis is placed on the role of silviculture to enhance forested ecosystems to insure sustainability of the resource.

II. Course Policies

- A. **Attendance:** Attendance is required. Upon missing three classes or two labs a student will be dropped from the class

- B. **Class participation:** Participation is essential. Students are assigned to work in small groups on a routine basis; it is essential that students be willing to cooperate and communicate to complete course load.
- C. **Grading:** Weekly exams, lab projects, and a final exam, will be given to determine your grade. Note that all exams are cumulative. The grading system follows:

Quizes

Ten at 50 points each	500 points
Lab Reports	
Six at 50 points each	300 points
Lab Practical	100 points
Lecture Final	100 points
Total Points	1,000

Grading Scale:

$$\% = \frac{\text{Accumulated Points}}{\text{Total Points}}$$

Grade	Percentage
A	90 - 100
B	80 - 91
C	70 - 80
D	60 - 69
F	less than 60

Please note: No make-up exams will be

- D. **Extra Credit:** There is no extra credit for this class.
- E. **Tutoring and extra help:** Assistance will be available on an individual or group session request.
- F. **Acceptable style/format of assignments:** All reports are to be typed (preferably done on the computer) double space on white paper. Details for each report will be distributed at a later date.
- G. **Assignment Deadlines:** See II C.
- H. **Plagiarism and cheating:** Refer to Student Handbook.
- I. **Exams and Quizzes:** See II C. Make-up quizzes and exams are generally not permitted except for extenuating circumstances.

III. **Course Requirements**

- A. Class Schedule: See next page.
- B. Library Assignments: As required for lab reports.
- C. Required Reading: See III A.
- D. Recommended Reading: Silvics of North America and Silviculture Systems of the United States are on reserve in the instructor's office.

Course Schedule

Wk	Lecture	Laboratory	Lecture	Notes*
1	Introduction	Shade & Moisture Tolerance	Stand Age Class	Read Ch. 1
2	The Role of Soils in Ecosystems	Soil Clsf., survey, soil tests. <u>Lab Report#1</u>	Soil Properties	Read Ch. 2 & Soil
3	Soil Nutrients	Site Index, Site Quality, Stocking, Succession. <u>Lab Report#2</u>	Growing Space - the impact on ecosystems <u>Lab Rpt #1 Due</u>	Read Ch. 3
4	Individual Tree and Treatment	Christmas Tree Production. <u>Lab Report #3</u>	Methods of Thinning <u>Lab Report #2 Due</u>	Read Ch. 4
5	Applications of Thinning	Thinning/Pruning Applied <u>Lab Report#4</u>	Release Operations <u>Lab Report # 3 Due</u>	Read Ch. 5
6	Herbicides role on sustainable forestry	Stocking Guides Regulation Applied	Improvement Cuts and Salvage <u>Lab Report # 4 Due</u>	Read Ch. 6-7
7	Regeneration of forest stands and ecosystems	NED Stocking Guide Thinning <u>Lab Report #5</u>	Site Treatment	Read Ch. 8-9
8	Genetic Improvement & Nursery Operations	Crop Tree Release <u>Lab Report#6</u>	Nursery operations and Tree Planting <u>Lab Report # 5 Due</u>	Read Ch 11-12
9	Silviculture Systems and Regeneration Methods on forest stands and ecosystems	USFS Tour <u>Lab Report #7</u> Parsons, WV	Clearcut System <u>Lab Report # 6 Due</u>	Read Ch 13
10	Shelterwood System	Pine Management <u>Lab Report #8</u>	Seed Tree System <u>Lab Report #7 Due</u>	Read Ch 14
11	Sustainable Forest Ecosystems: Silviculture and Wildlife	Hardwood Marking	Sustainable Forest Ecosystems: Silviculture and Water Quality	Read Ch 20,18
12	Sustainable Forest Ecosystems: Silviculture and Ethics, SAF Code of Ethics	Pine Marking and Thinning Application	Sustainable Forest Ecosystems: Silviculture and Old Growth <u>Lab Report #8 Due</u>	Read Ch 17, 19
13	Selection System	<u>Lab Practical</u> Old Growth Site Visit- Cathedral State Park, Swallow Falls State Park	Uneven Aged Management	Read Ch 15, 16
14	Deferred Rotations	Selection System (in class) cut rations / NED / system guidelines	Selection System (computer)	
15	Selection System Marking Program	Selection System Marking	<u>Final Exam & Lab Practical</u>	

*Note: Readings will be modified. Use this as a guide to help you study!

Assignments must be handed in at the beginning of the specified class. Lab Reports will not be accepted after the due date.