

INSTRUCTIONAL PACKAGE

FOR 271

SILVICULTURE

Effective Term FALL/2019

INSTRUCTIONAL PACKAGE

DEPARTMENTAL MISSION STATEMENT:

Forestry Management Technology Department & Program Mission Statement

The mission of the Department, the Programs and its faculty is to support the broader College's goals, but also provide a comprehensive silviculturally based environmental education that recognizes the broad multiple uses demanded from the forest environments of South Carolina, the Southeastern United States and the nation.

- We want our graduates to recognize how their daily decisions will have a lasting impact on the social, cultural, economic, and environment fabric of our state, region and country.
- Their natural resource decision making process must be based on the highest professional and ethical standards for the long term protection and promotion of a high demand resource.
- We strive to prepare well trained forest, wildlife and natural resource technicians for both public and private sector employers and promote career opportunities for our graduates.

PART I: COURSE INFORMATION

Effective Term: Fall 2019 COURSE PREFIX: FOR 271

COURSE PREFIX: FOR 271 COURSE TITLE: Silviculture CONTACT HOURS: 3 hours Lecture, 3 hours lab CREDIT HOURS: 4 credits

RATIONALE FOR THE COURSE:

Forestry is a profession requiring the manipulation of environmental factors to achieve certain human goals (timber production, water quality improvement, wildlife habitat enhancement, etc.). The Silviculture course is an in-depth look into regeneration, intermediate treatments and harvesting operations performed on a forest property in order to achieve the goals of a landowner or society as a whole, given economic and ecological considerations.

COURSE DESCRIPTION:

This course covers the treatment of forest stands to achieve prescribed objectives. Specific topics include intermediate forest management practices, the four basic harvest methods, and regeneration of trees.

PREREQUISITES/CO-REQUISITES:

Credit level FOR 154 Minimum Grade D and Credit level FOR 156 Minimum Grade of C or Instructor Permission.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials. WaveNet and D2L email access.

STUDENT IDENTIFICATION VERIFICATION

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

SAFETY: Prior to going to the woods for a field lab, the instructor will hold a safety briefing identifying the boundaries of the study area, any known hazards and the proper use of Personal Protective Equipment assigned to that exercise.

Lab Exercises: This class has an outdoor lab associated with it. Please come appropriately dressed for lab with long pants and boots at a minimum.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Module #1

Materials Covered: Chapters 1, 2, 3, and 4

*Assessment(s): Classroom Activity, Vocabulary Quiz, Lab reports. Unit Test

Learning Outcomes:

- 1. Explain the purpose and limitations of silviculture.
- 2. Identify the various fields of silvicultural practice.
- 3. Relate silviculture practices to forest management in broad terms.
- 4. Relate cutting practices to the manipulation of stand structure and growing stock.

Module #2

Materials Covered: Chapters 5, 6, and 7

*Assessment(s): Classroom Activity, Quiz, Lab reports.

Unit Test

Learning Outcomes:

- 1. Describe the ecological role of natural disturbances on the forest.
- 2. List the kinds of natural regeneration disturbances that occur in the forest.
- 3. Explain the stages of natural regeneration.
- 4. Explain the elements of silvicultural systems.
- 5. Relate application of silviculture practices to landowner objectives.
- 6. Identify environmental impacts of silvicultural practices.
- 7. Identify and describe stand conditions and composition, through measurements and observation.

Module #3

Materials Covered: Chapters 8, 9, 10, and 11

*Assessment(s): Complete classroom activity, Quiz, Lab reports.

Unit Test

Learning Outcomes:

- 1. Define silvicultural systems.
- 2. Compare high and low forest reproduction methods.
- 3. Identify the objectives of a silvicultural system.
- 4. Discuss control of damaging agents.
- 6. Define sustained yield.
- 7. Discuss the need for planned reproduction.
- 8. Define clearcutting.
- 9. Identify the modifications of clearcutting.
- 10. Discuss the application of clearcutting and its advantages and disadvantages.
- 11. Define the seedtree system, the characteristics of a good seedtree, and their number and distribution.
- 12. Identify the modifications of the seedtree system.

Module #4

Materials Covered: Chapters 14, 15, and 16

*Assessment(s): Complete classroom activity, Quiz, Lab reports.

Unit Test

Learning Outcomes:

- 1. Identify alternatives available for regeneration.
- 2. Describe tree improvement work in the South.
- 3. Describe steps used in obtaining seed for regeneration.
- 4. Identify methods of planting seedlings.
- 5. Describe southern nursery operations.
- 6. Identify factors to consider use of natural seed source.
- 7. Identify seedbed preparation methods.
- 8. Identify advantages and disadvantages of planting and natural seeding.
- 9. Describe factors to consider while planning regeneration of a site.
- 10. Describe seed orchard operations.

Module #5

Materials Covered: Chapters 17, 18, 20, 21, 24, and 29

*Assessment(s): Quizzes, lab reports

Unit Test

Learning Outcomes:

- 1. Identify various methods and modifications of thinning.
- 2. Describe the objectives, advantages and disadvantages of each thinning method.
- 3. Identify the types of release cuttings.
- 4. Describe the objectives of each type of release cutting and the class of stems to be removed.
- 5. Identify the ways and means of stem removal or chemical eradication.
- 6. Describe chemical activity on plants when used for stem removal.
- 7. Identify various means of chemical application.
- 8. Identify potential environmental impacts of chemicals used in release operations.
- 9. Relate stand conditions and composition to correct thinning application.
- 10. Relate effect of thinning to intermediate and long-term forest development.
- 11. Identify environmental impacts of silviculture on wildlife habitat.
- 12. Identify environmental impacts of silviculture on watersheds.

*Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students' performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Tests	50%
Written Assignments/Lab Reports	30%
Quizzes	5%
Project	5%
<u>Final Exam</u>	10%
	100%

^{*}Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

GRADING SYSTEM:

The College adheres to a 10 point grading scale A = 100 - 90, B = 89 - 80, C = 79 - 70, D = 69 - 60, F = 59 and below.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop (<u>ACADEMIC CALENDAR</u>). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

Part V: Student Resources



The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

- 1. Academic coaches for most subject areas, Writing Center Support, and college success skills.
- 2. On-line student success and academic support resources.

Visit the SSTC website: <u>Student Success & Tutoring Center</u> and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455 or go to the <u>Online Resource Center</u> to access on-demand resources any time.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment!
- 2. Use the Online Resource Center (ORC) for COMPASS support, technology education, and online tools.
- 3. **Drop-in technology support or scheduled training** in the Center or in class.
- 4. In-person workshops, online tutorials and more services are available.

Visit the WNC website: <u>Wavenet Central</u>. Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Disability Services:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational

accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

Inquiries regarding the non-discrimination policies: Students and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs, Dr. Melissa Batten, VP Student Affairs, Title IX Coordinator, Building 1100, Room 107A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5228, Melissa.Batten@hgtc.edu. Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources, Jacquelyne Snyder, VP Human Resources, Section 504, Title II, and Title IX Coordinator, Building 200, Room 212A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, Jacquelyne.Snyder@hgtc.edu.

Title IX Requirements

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non- discrimination policies:		
Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.	Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.	
Dr. Melissa Batten, VP Student Affairs	Jacquelyne Snyder, VP Human	
Title IX Coordinator	Resources	
	Section 504, Title II, and Title IX Coordinator	
Building 1100, Room 107A, Conway	Building 200, Room 212A, Conway Campus	
Campus	PO Box 261966, Conway, SC 29528-	
PO Box 261966, Conway, SC 29528-	6066	
6066	843-349-5212	
843-349-5228	Jacquelyne.Snyder@hgtc.edu	
<u>Melissa.Batten@hgtc.edu</u> _	, ,	