



# **INSTRUCTIONAL PACKAGE**

FOR 265  
Equipment & Timber Harvesting

Effective Term  
Fall 2025/Spring 2026/Summer 2026

# 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 as detailed above, 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 2025/Spring 2026/Summer 2026

COURSE PREFIX: FOR 265

COURSE TITLE: Equipment & Timber Harvesting

CONTACT HOURS: 3 hr lecture; 3 hr lab

CREDIT HOURS: 4

### RATIONALE FOR THE COURSE:

This course is designed to acquaint the student with the variety of logging equipment and methods used in the harvesting of trees. The student will also learn how to establish an operating budget or business plan for a small timber harvesting firm including equipment payments, operating costs, payroll, benefits, etc. (Successful completion of this course and completion of the SC BMP Field Orientation with the SC Forestry Commission qualifies a student for their SC TOP Logger certification.)

### COURSE DESCRIPTION:

This course is an analysis of logging situations and decision-making regarding timber harvesting. A study of the various equipment and tools used in forestry operations, techniques of operating and maintaining equipment, and harvesting operations and the costs involved are included. Students will prepare a business plan for a timber harvesting company.

### PREREQUISITES/CO-REQUISITES:

(Credit level FOR 156 Minimum Grade of C or Credit level FOR 156 Minimum Grade of TC) and (Credit level FOR 269 Minimum Grade of C or Credit level FOR 269 Minimum Grade of TC) or (Credit

level MAT 120 Minimum Grade of C or Credit level MAT 120 Minimum Grade of TC)

\***Online/Hybrid** courses require students to complete the [DLi Orientation Video](#) prior to enrolling in an online course.

### **REQUIRED MATERIALS:**

Please visit the [BOOKSTORE](#) online site for most current textbook information.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

### **ADDITIONAL REQUIREMENTS:**

Students will need to have a Hard Hat and boots (steel-toe are preferred) for lab; a pocket engineer's scale (10 units / inch); flash drive, calculator, and safety glasses. SC Best Management Practices for Forestry Manual will be provided in class.

### **SAFETY AWARENESS**

All laboratories are conducted outdoors in whole or in part, regardless of weather conditions. Appropriate clothing is required, including pants and boots. Please do not wear sandals, tennis-shoes, sneakers, crocs, flip-flops, slippers, etc. Appropriate protective clothing should be worn when inclement weather is anticipated. Students should consider raingear, jackets, and gloves. Because of the obvious health risks associated with exposure to inclement weather, the instructors reserve the right to dismiss any student who is not properly dressed from any lab period. Being outdoors carries some additional risk. Always be aware of your surroundings. Pay special attention while crossing roads or examining trees near roads. Bees, wasps and yellow jackets, although not common, may be encountered during a lab. You may wish to inform your instructor of any allergies or other medical conditions that you may have. Poison-ivy will be present, so know what the species looks like. It is everyone's responsibility for keeping the class safe.

### **TECHNICAL REQUIREMENTS:**

Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials.

Access to myHGTC portal for student self-services.

College email access – this is the college's primary official form of communication.

### **STUDENT IDENTIFICATION VERIFICATION**

Students enrolled in online courses will be required to complete identity 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.

**NETIQUETTE:** is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit [Online Netiquette](#).

**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. Long pants and boots are required for field labs.

**LAB EXERCISES:** This class has an outdoor lab associated with it. This course will entail frequent field trips to timber harvesting operations, often under hazardous conditions. Hardhats will be required to be worn on all field labs where heavy equipment will be present. Please come appropriately dressed for lab with long pants and boots. Students are reminded to be alert at all times, and think safety.

## Part II: Student Learning Outcomes

### COURSE LEARNING OUTCOMES and ASSESSMENTS\*:

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

#### Module #1

**Materials Covered:** Chapters on Logging History, Skidding, Felling and Limbing, Bucking & Loading

**\*Assessment(s):** Complete class review activity / Unit Test

#### Learning Outcomes:

1. Describe the basic components of a timber harvesting system.
2. Explain how a logging deck and associated skid trails are to be laid out.
3. Identify the various mill specifications effecting load merchandizing, delivery and price.
4. Identify load limitations (height, weight and length) for interstate and intrastate highways.

#### Module #2

**Materials Covered:** Chapters on Reasons for Harvesting Plans, Visual Quality & Timber Harvesting, Buying Timber, and Selling Timber.

**\*Assessment(s):** Complete class review activity / Unit Test

#### Learning Outcomes:

1. Identify the different ways that advanced harvest planning can improve productivity, landowner satisfaction, safety and environmental protection.

2. Identify the steps necessary to prepare a tract of timber for sale.
3. Identify the steps necessary to successfully purchase a tract of timber.
4. Identify what steps need to be examined to protect the visual quality of a property during a timber harvesting operation.

### **Module #3**

**Materials Covered:** Chapters on Chainsaw, Hand Tools, Safety, Land Ownership Trends, Logging Business and Non-conventional Logging Systems

**\*Assessment(s):** Complete class review activity / Unit Test

#### **Learning Outcomes:**

1. Identify the working parts of a chainsaw and the lubrication and service points.
2. Identify the role that some hand tools still enjoy in this business. Know safety rules regarding the safe use of hand tools and power equipment. Know common methods of hand tool maintenance and repair.
3. Identify the national and regional trends in landowner and how it influences equipment size and costs.
4. Identify the settings that require non-conventional logging systems (balloon, cable, helicopter, swamp, etc).

### **Module #4**

**Materials Covered:** Chapters on Best Management Practices for Forestry, Sustainable Forestry Initiative (SFI) and SC TOP Logger Certification.

**\*Assessment(s):** Complete class review activity / Unit Test

#### **Learning Outcomes:**

1. Identify the legal requirements associated with the Clean Water Act and SC Best Management Practices as they relate to timber harvesting, site preparation and environmental protection.
2. Identify the voluntary steps associated with the industry based Sustainable Forestry Initiative (SFI) Program.
3. Successful completion of this course and completion of the SC BMP Field Orientation with the SC Forestry Commission qualifies a student for their SC TOP Logger certification.

### **Module #5 - Capstone Project**

#### **Learning Outcomes:**

1. Apply academic knowledge in a professional setting.
  - a. Prepare a property for and execute a timber cruise and value assessment. Collect data using tally sheets and/or data collectors.
  - b. Compute all volumes and values using self-designed fixed plot spreadsheets in Excel.
  - c. Prepare a competitive bid, from the perspective of the buyer, on the timber to be harvested based on quality, markets, logging costs and cruise information.
  - d. Compute the various, known fixed ownership and operational costs for each piece of

equipment and associated labor.

e. Factor in all associated (known) costs including workman's compensation, insurance, taxes, depreciation, etc.

f. Decide whether known logging rates in your given area are reasonable or not, for planning your competitive bid.

2. Develop a timber harvesting plan, from the perspective of the land management forester, for a property, and budget the operational costs of a timber sale.

a. Prepare a property for and execute a timber cruise and value assessment. Collect data using tally sheets and/or data collectors.

b. Compute all volumes and values using self-designed fixed plot spreadsheets in Excel.

a. Design a harvest plan and layout decks, trails and buffers.

### **\*Course Assessments:**

Develop a business management plan and apply it against a timber sale for operational profitability.

Learn about the impacts of depreciation and taxes for a business.

## **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\***

Unit Tests	40%
Lab Exercises	25%
Harvesting Plan	15%
Timber Appraisal	10%
Final Exam	10%
	100%

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

### **GRADING SYSTEM:**

Please note 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. 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.**

**For online and hybrid courses**, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, and if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

## Part V: Student Resources



### THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

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

1. **Academic tutors** for most subject areas, **Writing Center support**, and Academic Coaching for college success skills.
2. Online **tutoring** and academic support resources.
3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring, contact the SSTC at [sstc@hgtc.edu](mailto:sstc@hgtc.edu) or self-schedule in the Penji iOS/Android app or at [www.penjiapp.com](http://www.penjiapp.com). Email [sstc@hgtc.edu](mailto:sstc@hgtc.edu) or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.



## STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following free resources:

1. Getting around HGTC: General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. In-person and remote assistance are available for Desire2Learn, Student Portal, Degree Works, and Office 365.
3. Chat with our staff on TECH Talk, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552. Visit the Tech Central website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option # 1.



## HGTC LIBRARY:

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries are equipped with computers to support academic research and related school work; printing is available as well. Visit the [Library](#) website for more information or call (843) 349-5268.

## STUDENT TESTING:

Testing in an **online/hybrid** course and in **make-up exam** situations may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms(which may have a fee associated with the usage)

Furthermore, tests may have time limits and/or require a proctor.

Testing candidates must make their appointments 24 hours in advance.

Students must bring a physical ID in order to take a test.



Proctoring can be accomplished either face-to-face at an approved site or online through our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

## **DISABILITY SERVICES:**

HGTC is committed to providing an accessible environment for students with disabilities. Students seeking accommodations are encouraged to visit HGTC's [Accessibility and Disability Service webpage](#) for detailed information.

It is the student's responsibility to self-identify as needing accommodations and to provide appropriate documentation. Once documentation is submitted, the student will participate in an interactive process with Accessibility and Disability Services staff to determine reasonable accommodations. Students may begin the accommodations process at any time; however, accommodations are **not retroactive** and will only be applied from the point at which they are approved. Students must contact the office **each semester** to renew their accommodations.

For assistance, please contact the Accessibility and Disability Services team at [disabilityservices@hgtc.edu](mailto:disabilityservices@hgtc.edu) or 843-796-8818 (call or text).

## **COUNSELING SERVICES:**

HGTC Counseling Services strives to optimize student success through managing personal and academic concerns that may interfere with achieving educational goals. Staff are available to every student for assistance and guidance on personal matters, academic concerns and other areas of concern. HGTC offers free in-person and telehealth counseling services to students. For more information about counseling services, please reach out to [counseling@hgtc.edu](mailto:counseling@hgtc.edu) or visit the website the [Counseling Services webpage](#).

## **STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:**

Our sincere commitment to both effective business management and equitable treatment of our employees requires that we present this Policy Statement as an embodiment of that commitment to the fullest.

Discrimination is conduct that includes unjust or prejudicial treatment based upon an individual's sex, race/color, religion, national origin, age, disability, service in the uniformed services (as defined in state and federal law), veteran status, political ideas, marital or family status, pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation, genetic information, genetic identity, gender expression, or sexual orientation that excludes an individual from participation in, denies the individual the benefits of, treats the individual differently, or otherwise adversely affects a term or condition of a person's working or learning

environment. This includes failing to provide reasonable accommodation, consistent with state and federal law, to persons with disabilities.

## **INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:**

**Student and prospective student** inquiries concerning Section 504, Title II, Title VII, 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, Section 504, and Title II Coordinator*

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

[Melissa.Batten@hgtc.edu](mailto: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**

*Affirmative Action/Equal Opportunity Officer and Title IX Coordinator*

Building 200, Room 205B, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

[Jacquelyne.Snyder@hgtc.edu](mailto:Jacquelyne.Snyder@hgtc.edu)

## **TITLE IX REQUIREMENTS:**

Title IX of the Education Amendments of 1972 protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination.

HGTC prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking and will provide students, faculty, and staff with necessary information regarding prevention, policies, procedures, and resources.

Any student, or other member of the college community, who believes that they have been a victim of sexual harassment, domestic violence, dating violence, sexual assault, or stalking may file a report with the college's Title IX Coordinator or campus law enforcement\*.

\*Faculty and Staff are required to report these incidents to the Title IX Coordinator 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).

**Student and prospective student** inquiries concerning Title IX and its 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, Section 504, and Title II Coordinator*  
Building 1100, Room 107A, Conway Campus  
PO Box 261966, Conway, SC 29528-6066  
843-349-5228  
[Melissa.Batten@hgtc.edu](mailto:Melissa.Batten@hgtc.edu)

**Employee and applicant** inquiries concerning Title IX and its application to the College may be directed to the Vice President for Human Resources.

**Jacquelyne Snyder, VP Human Resources**

*Affirmative Action/Equal Opportunity Officer and Title IX Coordinator*  
Building 200, Room 205B, Conway Campus  
PO Box 261966, Conway, SC 29528-6066  
843-349-5212  
[Jacquelyne.Snyder@hgtc.edu](mailto:Jacquelyne.Snyder@hgtc.edu)

## **PREGNANCY ACCOMMODATIONS**

Under Title IX, colleges must not exclude a pregnant student from participating in any part of an educational program. Horry-Georgetown Technical College is committed to ensuring that pregnant students receive reasonable accommodations to ensure access to our educational programs.

Students should advise the Title IX Coordinator of a potential need for accommodations as soon as they know they are pregnant. It is extremely important that communication between student, instructors, and the Title IX Coordinator begin as soon as possible. Each situation is unique and will be addressed individually.

Title IX accommodations DO NOT apply to Financial Aid. Financial Aid regulations do not give the College any discretion in terms of Financial Aid eligibility.

Certain educational programs may have strict certification requirements or requirements mandated by outside regulatory agencies. Therefore, in some programs, the application of Title IX accommodations may be limited.

To request pregnancy accommodations, please complete the [Pregnancy Intake Form](#).