

# INSTRUCTIONAL PACKAGE

FOR-130

Dendrology

Effective Term Fall 2019

## INSTRUCTIONAL PACKAGE

Department 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 2019

COURSE PREFIX: FOR-130 COURSE TITLE: Dendrology

CONTACT HOURS: 2 Lecture, 3 Lab CREDIT HOURS: 3

### **RATIONALE FOR THE COURSE:**

Dendrology, the study of trees, is designed to acquaint the student with the variety of forest trees in North America, their means of identification and major uses whether commercial, ornamental or for wildlife benefit. The basics of botany are also discussed to give the student an understanding of how the plant functions.

#### **COURSE DESCRIPTION:**

This course is a study of the characteristics and uses of important trees, shrubs, and lesser vegetation of the southern forest. It includes collecting, mounting, and identifying approximately 100+ species by leaf, twig, bark, and growth characteristics.

### PREREQUISITES/CO-REQUISITES:

(SAT Critical Reading 380 or ACT Reading 14 or ACCUPLACER Reading Comp 056 or New ACCUPLACER Reading Comp 235 or COMPANION Reading 056 or Credit level ENG

- 101 Minimum Grade of C or Credit level ENG 155 Minimum Grade of C or Credit level ENG
- 100 Minimum Grade of C\* or Credit level ENG 155 Minimum Grade of TC or Credit level ENG
- 101 Minimum Grade of TC or Multiple Measures English 1)

#### **REQUIRED MATERIALS:**

Two Books: Native Trees of the Southeast by Kirkman, 7<sup>th</sup> Edition, 2007, Publisher: Workman, ISBN: 9780881928280 and Forest Plants of the Southeast and Their Wildlife Uses by James H. Miller and Karl V. Miller, Publisher: Longleaf, 2005, ISBN: 9788080327488.

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks. <u>BOOKSTORE</u>. Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

#### **ADDITIONAL REQUIREMENTS:**

Each student should wear long pants and boots or other adequate footwear for the outdoor lab portion of this class.

#### **TECHNICAL REQUIREMENTS:**

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

#### **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.

## **Part II: Student Learning Outcomes**

### **COURSE LEARNING OUTCOMES and ASSESSMENTS\*:**

Module #1

Materials Covered: Lecture Units 1, 2, 3 and 4
\*Assessment(s): Complete class review activity.

**Unit Test** 

## Learning Outcomes:

- 1. Identify the basic structures associated with Gymnosperms, Angiosperms (Monocots and Dicots).
- 2. Describe the structure of scientific names and the how they may change over time.
- 3. Describe the differences between scientific names and common names.
- 4. Demonstrate the use and application of a dichotomous key.
- 5. Identify the various leaf arrangements, parts and structures, bud location, etc.

Module #2

Materials Covered: Units 5, 6 and 7.

\*Assessment(s): Complete class review activity.

**Unit Test** 

### Learning Outcomes:

- 1. Identify the basic concepts of plant reproduction including genetic recombination; self-fertilization (inbreeding and apomixes) and the short and long range benefits.
- 2. Identify the traits and differences of a Successional and a Climax forest.
- 3. Identify how plant communities (trees, shrubs & other ground cover) develop on different land types: obligate wetland, facultative wetland, facultative, facultative upland and upland.
- 4. Identify the environmental factors that contribute to the development of a plant community (soils, climate, physiographic features, biota, etc.).
- 5. Identify the habits of a native, exotic, naturalized or invasive plant.
- 6. Identify why a plant is thought to be tolerant or Intolerant.

### Module #3

Materials Covered: Chapter 7 and Forest Biology \*Assessment(s): Complete class review activity.

**Unit Test** 

## Learning Outcomes:

1. Identify basic parts of a cell as they relate to plant development.

- 2. Identify the roles of Primary and Secondary growth in trees and how to influence each.
- 3. Identify the function of the Vascular Tissues: Xylem, Cambium, Phloem tissues and the Dermal Tissues.
- 4. Identify how the three different types of shoot growth can influence how we control plants thru herbicides or fertilization.

## Capstone Project

\*Assessments: Completed leaf mount collection for up to 130 specimens.

All mounting cards will indicate a plant's range, Common name, scientific name, Family name (Latin and English), Habitat and uses. Leaf Mount Collection will be organized and indexed by its Latin

family name and scientific name.

### Learning Outcomes:

- 1. Construct a leaf mount collection to serve as a study guide for weekly plant identification quizzes.
  - a. Each specimen will be collected from its habitat and properly dried.
  - b. Each specimen will be researched to identify its local common name, scientific name, family name (Latin and English), habitat and uses.
  - c. Distinguishing plant structures and features (leaves, buds, twigs, bark, fruit, habit, and crown shape) will be identified to help students to learn identification traits.

## **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\***

Approx.10-12 weekly Tree Identification Quizzes	50%
Four Latin Name Quizzes	8%
Tree Identification Notebook Project	12%
Written Quizzes, Tests & Final on Tree Biology	18%
Tree Identification Final	<u>12%</u>
	100%

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

#### **GRADING SYSTEM:**

The College's and Departmental grading system is delineated in the Catalog. 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. You must have your Dean's approval if changes in the scale are made.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing

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

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.



### CENTRALTECH Central – Student Information Center

TECH Central provides quality enrollment and collegiate guidance for students, faculty, and staff. Services include phone, walk-in, and online technical support for technology training and troubleshooting. Additionally, we offer support in Office 365, Outlook E-mail setup, and ID cards.

**Phone:** 843-349-5340

Email: techcentral@hgtc.edu

**Text:** 843-357-8552

**TECH Talk (Live Chat):** Located on the "Home" tab in WaveNet.

Website: www.hgtc.edu/techcentral

#### Locations:

Conway Building 1100, Room 132D Grand Strand Building 200, Room 136

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. 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	
Melissa.Batten@hgtc.edu _		