

# **INSTRUCTIONAL PACKAGE**

# FOR 154

Mensuration

Effective Term Spring 2018

# **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: 2017-10

COURSE PREFIX: FOR 154 CONTACT HOURS: 3 lecture hours COURSE TITLE: Mensuration CREDIT HOURS: 3 hours

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

The purpose of this course is to give the student a working knowledge of the techniques and instrumentation that are commonly utilized to measure the important parameters of a standing forest (basal area, height, diameter, site quality, stand density, and volume). The ability to measure these parameters is essential to develop information required in the decision-making processes involved in silviculture and forest management.

#### **COURSE DESCRIPTION:**

This course is a study of the techniques and instruments used in the measurement of standing or harvested trees. The use of log rules, volume tables, yield tables, and elementary statistics are included.

#### PREREQUISITES/CO-REQUISITES:

(SAT Critical Reading 380 and SAT Mathematics 400) or (ACT English 12 and ACT Math 14 and ACT Reading 17) or (COMPASS Reading 65 and COMPASS Writing 40) or (ACCUPLACER Reading Comp 056 and ACCUPLACER Sentence Skills 058 and ACCUPLACER Arithmetic 043 or ACCUPLACER Elementary Algebra 050) or (COMPANION Reading 056 and COMPANION Sentence Skills 058 and COMPANION Arithmetic 043 or COMPANION Elementary Algebra 050) or (Multiple Measures English 1 and Multiple Measures Math 1)

#### **REQUIRED MATERIALS:**

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

#### BOOKSTORE.

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

ADDITIONAL REQUIREMENTS: Hand-held Scientific Calculator w/Trig Functions (Sine, Cosine, Tangent)

#### **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\*:

UNIT I

The student will be introduced to the basic tree measurements and the instruments used to take such measurements. The student will be able to discuss the concepts of cubic volume, cord measure, and weight scaling of pulpwood and sawtimber.

Outcomes:

- 1. Define DBH and its appropriate measurement with specific instruments.
- 2. Define and calculate cubic volume; cord; MBF; cunit; stick scale; weight scale.

#### UNIT II

The student will know the three major log rules and their applications by species group. Board-foot measuring will be contrasted with weight scaling.

#### Outcomes:

1. Identify basic log scaling rules.

#### UNIT III

The student shall become familiar with the basic aspects of land surveying as it relates to distance and direction measurement and area determination. The U.S. Public Land Survey System and Metes and Bounds Land description will be described and contrasted.

#### Outcomes:

- 1. Discuss concept of land area, chains, pacing, and compass operation.
- 2. Define bearing; azimuth; agonic line; declination.

#### UNIT IV

The student will be able to measure, in the field, the following parameters of standing trees: height, tree form, age, board-foot volume, and biomass.

Outcomes:

- 1. Define, establish, and measure total height; merchantable height with specific instruments.
- 2. Use increment borer to determine "tree age."

UNIT V

The student will be introduced to the basic concepts of timber inventory.

Outcomes:

1. Demonstrate methods and types of timber cruising (100% tally--strip, line-plot, point sampling).

# \*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\***

In Class Assignments	30%
Unit Tests	30%
Field Exercises	20%
Final Exam	<u>20%</u>
	100%

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

#### **GRADING SYSTEM:**

State the College's or departmental grading system as 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 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</u> <u>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 eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy 6/28/17 ADA

may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. **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. Room locations and Live Chat is available on the SSTC website.



# 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.

**Student Testing:** (If course is offered in multiple format include this section, delete if only F2F sections are offered.)

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through RPNow, our online proctoring service. To find out more about proctoring services, please visit the <u>Online Testing</u> section of the HGTC's Testing Center webpage.

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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 Jocelyn Williams, 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, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

#### **Title IX Requirements**

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

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