



## INSTRUCTIONAL PACKAGE

HRT 154

Grounds Maintenance

Effective Term

Spring/2019

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## PART I: COURSE INFORMATION

Effective Term: Spring 2019

COURSE PREFIX: HRT 154

COURSE TITLE: Grounds Maintenance

CONTACT HOURS: 5.0

CREDIT HOURS: 3.0

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

The golf course superintendent or athletic field manager is normally responsible for the landscape areas away from the golf course proper. His job duties include supervision of a landscape maintenance crew that will care for the plants, shrubs, trees and turf on the non-golf related areas of the property. These areas might include the clubhouse, tennis courts, pool, formal gardens, croquet courts, etc. Therefore, the student needs to be trained in the development and implementation of proper maintenance schedules for public, industrial, institutional, and residential landscapes

### **COURSE DESCRIPTION:**

This course covers cost estimation of a landscape design and its maintenance, preparation of contracts, and development and implementation of maintenance schedules.

### **PREREQUISITES/CO-REQUISITES:**

None

### **REQUIRED MATERIALS:.**

None

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

[BOOKSTORE.](#)

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

### **ADDITIONAL REQUIREMENTS:**

The majority of laboratory sessions will be spent out of doors working on landscape maintenance projects. The student is advised that he/she should wear clothing that is appropriate for outside work activities, i.e., jeans, work shoes, gloves, protective eyewear, heavy coats in cold weather, etc. Any disabilities that would limit the student from participating in any work activity should be brought to the attention of the course instructor at the beginning of each laboratory session. Students are reminded that they are not allowed to miss more than one laboratory session in this class. Students will be given a laboratory grade equal to one major test grade based upon their participation in all laboratory exercises.

### **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.

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

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

#### **UNIT I. Landscape Business**

1. Discuss necessary steps and procedures to be followed in the initial establishment of his own business.
2. Discuss the various factors that should be considered when setting up a landscape maintenance contract.
3. List three (3) specific items that a good landscape company should do when it is interested in a particular project.
4. Summarize and explain seven (7) factors that should be considered before looking into a new landscape project.
5. Breakdown a cost analysis into its major parts.
6. Discuss the various components to be considered when determining the variable costs for a project.
7. Explain what an architect is responsible for on a project when he has been hired independently of any landscape company.
8. Outline in general terms a good procedure for working up a bid on a government project.
9. Explain when a performance bond is required and what it guarantees.

#### **UNIT II Site Modification**

1. Discuss the two primary reasons for shaping the ground surface.
2. Demonstrate the use of a topographic map, summarizing the important
3. Indicate the slope needed in the following cases:
  - a. from a building or house
  - b. an open lawn area
4. Discuss what should be done before any landscape project begins in terms of site cleanup, topsoil, and use of grade stakes.
5. List the advantages of good drainage.
6. List and discuss the standard methods used to solve drainage problems.
7. Indicate when it is the best time to put in an irrigation system and amend the soil.
8. Discuss a stepwise procedure for placing an irrigation system on an already established site.
9. Describe the greatest hazards to landscape plants you wish to save on a project.
10. Discuss why one would need to construct a dry well, then illustrate by simple diagram the best way to construct it.
11. Describe how you would protect an important tree if the soil on the project surrounding this tree must be lowered.

#### **Unit III Transplanting and Planting Techniques**

1. Discuss the general conditions that will more or less guarantee the success of a transplant operation.
2. Describe good indicators of a plant's health and vigor.
3. Explain when it is best to transplant:
  - a. deciduous trees and shrubs
  - b. evergreens
4. Describe, in a stepwise fashion, how you would dig up for transplant a deciduous tree or shrub from the nursery.
5. Describe, in a stepwise fashion, how you would dig up for transplant an evergreen.
6. Discuss the requirement of a root ball on the following:
  - a. evergreens
  - b. deciduous plants

7. Summarize how you would transplant a large difficult to transplant tree or shrub from the wild (remember root pruning).
8. Compare the storage of deciduous plants with evergreens.
9. Contrast the storage of deciduous plants with evergreens.
10. Describe how you would determine the drainage of the soil on an old landscape site.
11. Write, in your own words, the cardinal rule of planting.
12. List and explain five (5) ways to provide drainage for plants to be planted on an old site with poorly drained soil.
13. Describe generally the planting hole in terms of its width and depth. Do the same for larger specimens (i.e., 8 inch or more caliper trees; shrubs with a 3 foot soil ball).
14. Describe how to plant a bare-root plant. Do the same for a B + B.
15. Discuss why and how to prune after a transplant.
16. Discuss the
  - a. single stake
  - b. parallel stake
  - c. most common method of supporting small trees that have been newly installed.
17. Explain several purposes that tree wrapping serves.
18. Describe several ways one can reduce water loss in large plants after transplanting.
19. In very general terms, describe when and how to fertilize trees and shrubs of different sizes.
20. Define:
  - a. hardy plant
  - b. deciduous plant
  - c. evergreen
  - d. root prune
  - e. "heel-in"
  - f. anti-transpirant
  - g. mulch
  - h. annual
  - i. perennial.

#### Unit IV. Pruning

1. Define:
  - a. pruning
  - b. lead branch
  - c. scaffold branch
  - d. crotch
  - e. sucker
  - f. water sprout
2. List and explain seven (7) reasons for pruning.
3. In general terms, discuss winter, summer, autumn and spring pruning as to the proper time to prune.
4. Compare and contrast thinning out with heading back.
5. Discuss two (2) techniques used to rejuvenate old shrubs.
6. Illustrate the correct and incorrect ways to prune a twig.
7. Discuss the proper pruning of hedges.
8. Describe various pruning tools and their application.

#### Unit V. GroundCovers

1. Define:
  - a. cool season grass
  - b. warm season grass
  - c. seeding
  - d. plugging
  - e. sprigging
  - f. drilling.
2. Write the sequence to follow in preparation of a seedbed.
3. List three (3) methods of seeding.
4. Describe the best way to spread the recommended amount of seed.
5. Describe what should be done directly after seeding (include the depth of cover needed for)
  - a. small seed
  - b. large seed.
6. List and discuss in detail the three (3) major factors that you can control in the maintenance of landscape materials.

## COURSE LEARNING OUTCOMES and ASSESSMENTS\*:

### Module #1

**Materials Covered:** Cost Estimating

**\*Assessment(s):** Lab and Collaborative activity.

#### **Learning Outcomes:**

1. Calculate variable, direct and overhead cost..
2. Explain the actual cost of labor to perform each task
3. Develop a professional budget and cost estimate.

### Module #4

**Materials Covered:** Pruning

**\*Assessment(s):** Lab activity/ Test

#### **Learning Outcomes:**

1. Explain when to properly prune plants
2. Know and understand the two types of pruning cuts.
3. Explain the general plant responses to pruning.

***\*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\*

Unit Tests	50%
Cost Estimation Project	20%
Lab Participation and Homework	10%
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 ([ACADEMIC CALENDAR](#)). 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 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.**

**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, 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 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: [Student Success & Tutoring Center](#) 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: [Wavenet Central](#). 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.

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, 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).

<b>Inquiries regarding the non-discrimination policies:</b>	
<p>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 Associate Vice President for Student Affairs.</p>	<p>Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Associate Vice President for Human Resources.</p>
<p><b>Dr. Melissa Batten, AVP Student Affairs</b> <i>Title IX Coordinator</i></p> <p>Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 <a href="mailto:Melissa.Batten@hgtc.edu">Melissa.Batten@hgtc.edu</a></p>	<p><b>Jacquelyne Snyder, AVP Human Resources</b> <i>Section 504, Title II, and Title IX Coordinator</i></p> <p>Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 <a href="mailto:Jacquelyne.Snyder@hgtc.edu">Jacquelyne.Snyder@hgtc.edu</a></p>