

INSTRUCTIONAL PACKAGE

NRM 201

Soil Fertility and Plant Production

Spring/2018

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PART I: COURSE INFORMATION

Effective Term: Spring 2018

COURSE PREFIX: NRM 201 COURSE TITLE: Soil Fertility and Plant Production

CONTACT HOURS: 5 (2 Lecture & 3 Lab) CREDIT HOURS: 3

RATIONALE FOR THE COURSE:

Managing soil productivity is a basic component of natural resource management. However, understanding soil and its manipulations are not simple and can be costly. Students will learn how to manage the soil to meet landowner goals and the costs associated with many soil management practices.

COURSE DESCRIPTION:

This course is a study of agronomic principles of soil management and plant production, including the use and application of chemical fertilizers. Emphasis will be placed on utilizing the tools to effectively manage soils for productive wildlife habitat.

PREREQUISITES/CO-REQUISITES:

(COMPASS Reading 78 and COMPASS Writing 65) or SAT Critical Reading 420 or (ACT English 17 and ACT Reading 17) or Credit level ENG 100 Minimum Grade of C* or Credit level ENG 155 Minimum Grade of C or Credit level ENG 155 Minimum Grade of C or Credit level ENG 101 Minimum Grade of TC

REQUIRED MATERIALS:

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

BOOKSTORE.

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*:

I. Introduction to Soils, Properties, and Water

Materials Covered: Chapters 1, 2, & 3 "Soil Science Simplified"

*Assessment: Combined Test with Unit II

Learning Outcomes:

- i. Describe the function of soil
- ii. Provide the soil properties
- iii. Identify water's effect of soil productivity
- II. Basic Soil Manipulation Tool (Agricultural Tractor) Use and Safety

Materials Covered: Hand out

*Assessment: Combined Test with Unit I

Learning Outcomes:

- i. List and exhibit basic agricultural tractor safety
- ii Exhibit basic agricultural tractor operation
- iii. List the uses for the agricultural tractor
- III. Plant Growth and Nutrition and Organic Matter

Materials Covered: Chapters 5 and 6 "Soil Science Simplified"

*Assessment: Combined Test with Units IV and V

Learning Outcomes:

- i. Give the life functions of plants
- ii. Explain nutrient levels and crop yields
- iii. Determine the needs for fertilization
- iv. Evaluate fertilizers
- IV. Native Vegetation Management

Materials Covered: Hand Out

*Assessment: Combined Test with Units III and V

Learning Outcomes:

- i. Describe assessment of natural vegetation
- ii. Treatment of natural vegetation for wildlife habitat objectives
- V. Agricultural Attachments

Materials Covered: Hand Out

*Assessment: Combined Test with Units III and IV

Learning Outcomes:

- i. Describe use of common agricultural tractor attachments
- ii. Provide capital and maintenance expenses of such attachments
- VI. Soil Formation, Morphology, and Classification

Materials Covered: Chapters 7, 8, & 9 "Soil Science Simplified"

*Assessment: Unit Test with Unit VII

Learning Outcomes:

- i. List soil formation factorsii. Describe soil morphology
- iii. Provide soil classification details

VII. Herbicide Use

Materials Covered: Hand Out

*Assessment: Unit Test with Unit VI

Learning Outcomes:

- i. Explain proper application of herbicides including calibration methods
- ii. List common herbicides and expected results
- iii. Provide expenses of common herbicides

VIII. Soil Surveys and Environment

Materials Covered: Chapters 10, 11, & 12 "Soil Science Simplified"

*Assessment: Unit Test with Unit IX

Learning Outcomes:

- i. List soil survey uses
- ii. Explain soil erosion controls

IX. Small Engines

Materials Covered: Hand Outs

*Assessment: Unit Test with Unit VIII

Learning Outcomes:

- i. Describe maintenance of small engines
- ii. Describe solutions to common small engine problems

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

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

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 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:

- 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!
- Use the <u>Online Resource Center (ORC)</u> 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 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. 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.

Title IX Requirements

The South Carolina Technical College System does not discriminate 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 activities as required by Title IX. As outlined in the Violence Against Women Act, Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Students who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking are encouraged to report such incidents to the Title IX Coordinators:

Dr. Melissa Batten, AVP of Student Affairs Building 1100, Room 107A, Conway Campus 843-349-5228 Melissa.Batten@hgtc.edu Jacquelyne Synder, AVP of Human Resources Building 200, Room 212A, Conway Campus 843-349-5212 Jacquelyne.Snyder@hgtc.edu

*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).