



INSTRUCTIONAL PACKAGE

FOR 257

Forest Ecology

Effective Term

Fall 2018

INSTRUCTIONAL PACKAGE

PART I: COURSE INFORMATION

Effective Term: Fall 2018

COURSE PREFIX: FOR 257

COURSE TITLE: Forest Ecology

CONTACT HOURS: 2 Lecture Hours

CREDIT HOURS: 2 Credit Hours

RATIONALE FOR THE COURSE:

Forestry is a profession requiring the manipulation of environmental factors to achieve certain human goals (timber production, water quality improvement, wildlife habitat enhancement). All goals are tied to the environmental factors of soil, sunlight and available moisture and the plant life living within an area. The student will gain an understanding of the environmental factors affecting the plant community; plant community inter-relationships; factors influencing plant distribution and succession; and environmental forces affecting forest management.

COURSE DESCRIPTION: This course covers the scientific foundations on which cultural practices are based. It also includes the affects of environment upon tree growth and distribution and the inter-relationships which take place between a tree or forest stand and the environment.

This course will explore the concept of ecology as it applies to the forest ecosystem. It will examine the forest ecosystem by breaking it down into each aspect of the forest site, exploring the progression of the forest ecosystem through the process of succession, and determining how natural disturbances play a role. The course will also examine the concept of community ecology in an attempt to understand how trees relate to other species within the ecosystem.

PREREQUISITES/CO-REQUISITES:

Successful completion of FOR-130 and /or Instructor Permission.

REQUIRED MATERIALS:

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.

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*:

I. Introduction to Forest Ecology

Weeks 1-3

Materials Covered: Kimmins Chapter 3, Perry Chapters 2-4, Journal Articles

Assessment(s): Unit Exam, Discussions

Learning Outcomes:

1. Define ecology and ecosystems, specifically as applied to forests and forestry.
2. List the subdivisions of ecology
3. Identify global ecosystems
4. Identify major forest types and climatic controls
5. Explain the general role of silvics in forest ecology
6. Understand the effects of climate change on forest distribution
7. Describe the nutrient cycle

II. Understanding Forest Site Factors

Weeks 4-6

Materials Covered: Kimmins Chapters 7-11, Perry Chapter 14, Journal Articles

Assessment(s): Unit Exam, Discussions

Learning Outcomes:

1. Explain temporal and geographical variations in climate (solar radiation, temperature, wind)
2. Describe the physical nature of solar radiation and the ecological effects of solar radiation/light on the forest ecosystem
3. Identify the effects of temperature on plants and animals and forest ecosystems
4. List the steps of the water cycle
5. Define adaptations of plants and animals to water availability
6. Describe how moisture affects plant distribution, nutrient availability and competition
7. List the physical, chemical and biological properties of soils and describe how they affect plant growth
8. Label a soil profile
9. Discuss soil development and soil classification

III. Ecological Succession

Weeks 7-9

Materials Covered: Kimmins Chapter 17, Perry Chapter 8, Journal Articles

Assessment(s): Unit Exam, Discussions

Learning Outcomes:

1. Define succession and describe classical concepts/models of succession
2. Describe the mechanisms of succession
3. Discuss changes in the ecosystem during succession (function, stability, biodiversity, animal communities)
4. List and describe the three major types of sere
5. Describe how forest management affects succession

IV. Natural Disturbance

Weeks 10-12

Materials Covered: Kimmins Chapter 12, Perry Chapter 7, Journal Articles

Assessments(s): Unit Exam, Discussions

Learning Outcomes:

1. List the different types of natural disturbances that can affect an ecosystem
2. Describe how fire, wind, tectonic activity, flooding, invasive species, pests and pathogens can affect forest ecosystems
3. Describe how these disturbances can be mitigated with forest management
4. Describe how environmental protection/conservation is involved with natural disturbance and forest management

V. Community Ecology

Weeks 13-15

Materials Covered: Kimmins Chapter 15, Perry Chapters 9-13

Assessment(s): Unit Exam, Discussions

Learning Outcomes:

1. Describe the structure and form of plant communities
2. Explain the concept of the ecological niche
3. Discuss the interactions and relationships between trees and other species within an ecosystem
4. Describe the aspects of an ecosystem that create diversity within the community
5. Define biodiversity and apply the concept to describe a natural ecosystem
6. Explain the relationship between forest structure and biological diversity
7. Discuss how forest management can affect community ecology

**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*

Tests	60%
Term Paper	20%
Final Exam	20%
	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.

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.

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 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.	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.
Dr. Melissa Batten, AVP Student Affairs <i>Title IX Coordinator</i> Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu	Jacquelyne Snyder, AVP Human Resources <i>Section 504, Title II, and Title IX Coordinator</i> Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu