

# **INSTRUCTIONAL PACKAGE**

NRM 245 Wildlife Management and Techniques

Effective Term Fall 2023/Spring 2024/Summer 2024

# 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: Fall 2023/Spring 2024/Summer 2024

COURSE PREFIX: NRM 245 COURSE TITLE: Wildlife Management and

**Techniques** 

CONTACT HOURS: 2.0 Lecture, 3.0 Lab CREDIT HOURS: 3.0 Credits

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

This course introduces students to concepts such as population dynamics, carrying capacities, landscape fragmentation, wildlife census techniques and wildlife management techniques such as predator culls, habitat modification, captive breeding and release as well as examine the relationship between wildlife management and the law.

#### **COURSE DESCRIPTION:**

This course is a basic study and application of management and monitoring practices which are beneficial to wildlife. Methods for increasing food production, developing water sources, providing cover requirements, applied techniques of wildlife management and improving wetlands are included.

### PREREQUISITES/CO-REQUISITES:

Credit level <u>ENG 155</u> Minimum Grade of C or Credit level <u>ENG 155</u> Minimum Grade of TC or Credit level <u>ENG 101</u> Minimum Grade of C or Credit level <u>ENG 101</u> Minimum Grade of TC

\*Online/Hybrid courses require students to complete the <u>DLi Orientation Video</u> prior to enrolling in an online course.

### **REQUIRED MATERIALS:**

Please visit the **BOOKSTORE** online site for most current textbook information.

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

### **ADDITIONAL REQUIREMENTS:**

### **SAFETY AWARENESS**

Some laboratories are conducted outdoors in whole or in part, regardless of weather conditions. Appropriate clothing is required, including pants and boots. Please do not wear sandals, tennis-shoes, sneakers, crocs, flip-flops, slippers, etc. Appropriate protective clothing should be worn when inclement weather is anticipated. Students should consider raingear, jackets, and gloves. Because of the obvious health risks associated with exposure to inclement weather, the instructors reserve the right to dismiss any student who is not properly dressed from any lab period.

Being outdoors carries some additional risk. Always be aware of your surroundings. Pay special attention while crossing roads or examining trees near roads. Bees, wasps and yellow jackets, although not common, may be encountered during a lab. You may wish to inform your instructor of any allergies or other medical conditions that you may have. Poison-ivy will be present, so know what the species looks like. It is everyone's responsibility for keeping the class safe.

### **TECHNICAL REQUIREMENTS:**

Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials. Access to myHGTC portal for student self-services.

College email access – this is the college's primary official form of communication.

### **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.

**NETIQUETTE**: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit <a href="Online">Online</a> <a href="Netiquette">Netiquette</a>.

# **Part II: Student Learning Outcomes**

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

### Module #1

**Materials Covered:** Introduction to Wildlife Management and Ecology

\*Assessment(s): Class Participation, Labs, Unit Test

# **Learning Outcomes:**

- 1. Understand basic terms: preservation, conservation, management, carrying capacity, limiting factors, fragmentation, diversity.
- 2. Explain the purpose of wildlife management.
- 3. Identify human dimensions of wildlife management.
- 4. Understand the role of ethics in wildlife science.
- 5. Describe the relationship of federal and state regulations for game and nongame species.
- 6. Understand ecology (mutualism, commensalism, competition, predation, parasitism, herbivory) and the techniques for analyzing wildlife ecology data.
- 7. Explain food webs (Derital web, Grazing web, trophic levels).

### Module #2

**Materials Covered:** Wildlife Habitats

\*Assessment(s): Class Participation, Labs, Unit Test

# **Learning Outcomes:**

- 1. Describe major habitats of SC and wildlife that exist in them.
- 2. Describe how commercial forest management impacts wildlife.
- 3. Explain how changes to habitat affect wildlife (physical, biological, pollution)
- 4. Identify common techniques for vegetation sampling and measurement.
- 5. Learn how to measure wildlife nutrition.
- 6. Use geospatial technologies for wildlife studies.
- 7. Ability to write habitat recommendations for game and nongame wildlife species.

#### Module #3

**Materials Covered:** Population Dynamics

# \*Assessment(s): Class Participation, Labs, Unit Test

# **Learning Outcomes:**

- 1. Explain the components of a population (fecundity, mortality, growth rates)
- 2. Use life tables (cohort or dynamic, static or time specific)
- 3. Explain carrying capacity and exponential population growth.
- 4. Identify diseases and health risks for deer, turkey, and quail.
- 5. Identify risk factors and symptoms of transferable wildlife diseases to humans.
- 6. Examine fisheries stock management and methods (stock identification, assessment, biomass)

### Module #4

Materials Covered: Wildlife Censuses

\*Assessment(s): Class Participation, Labs, Unit Test

# **Learning Outcomes:**

- 1. Explain animal ethics
- 2. Identify different census types: total, sampling
- 3. Understand accuracy versus precision and bias errors
- 4. Identify and conduct direct and indirect methods: aerial surveys, trapping, transects, mark-recapture, call counts
- 5. Learn how to use remote cameras and bioacoustics to monitor wildlife.
- 6. Understand how to conduct a population analysis.
- 7. Understand how to use radar and UAVs to survey wildlife.

### Module #5

**Materials Covered:** Wildlife Management Techniques \***Assessment(s):** Class Participation, Labs, Unit Test

# **Learning Outcomes:**

- 1. Explain how common habitat modification techniques benefit wildlife (fire, vegetation management, role of food plots, invasive species)
- 2. Understand how predator control, hunting, and captive breeding/release affect wildlife populations.
- 3. Explain how different control techniques affect a population (manipulating mortality, fertility, genetic engineering, and other indirect methods)
- 4. Understand the role of adaptive management in wildlife conservation.
- 5. Identify common techniques in managing forestland, rangeland, wetlands and farmland for wildlife species.

6. Understand the most common techniques for managing terrestrial invasive species.

### Module #6

Materials Covered: Wildlife Management Project Based Learning

\*Assessment(s): Management Plan

### **Learning Outcomes:**

- 1. Identify the objectives of a management program for a species
- 2. Determine appropriate techniques for carrying out a census of the species
- 3. Identify techniques for increasing the population of the species
- 4. Present a management plan in a form that is appropriate for use by wildlife workers.

# **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	40%
Labs	30%
Class Participation	20%
Final Exam	10%
	100%

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

### **GRADING SYSTEM:**

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.

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.

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

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 <u>academic calendar</u> for deadlines for add/drop. 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.** 

**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, and 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 tutors for most subject areas, Writing Center support, and college success skills.
- 2. Online **tutoring** and academic support resources.
- 3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the <u>Student Success & Tutoring Center</u> website for more information. To schedule tutoring, contact the SSTC at sstc@hgtc.edu or self-schedule in the Penji iOS/Android app or at <u>www.penjiapp.com</u>. Email <u>sstc@hgtc.edu</u> or 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.



### STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following free resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment, financial aid, registration, and payment plan support!
- 2. Use the Online Resource Center (ORC) including Office 365 support, password resets, and username information.
- In-person workshops, online tutorials and more services are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
- 4. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the <u>Tech Central</u> website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.



### **HGTC LIBRARY:**

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries are equipped with computers to support academic research and related school work; printing is available as well. Visit the <u>Library</u> website for more information or call (843) 349-5268.

### **STUDENT TESTING:**

Testing in an **online/hybrid** courses and make-up exam situations may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms (which may have a fee associated with the usage) Furthermore, 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 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.

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 HGTC's <u>Accessibility and Disability Service webpage</u>. The Accessibility and Disability staff 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.

### 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/TITLE IX POLICIES:

**Student and prospective student** inquiries concerning Section 504, Title II, Title VII, 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, Section 504, and Title II 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

Affirmative Action/Equal Opportunity Officer and Title IX Coordinator Building 200, Room 205B, Conway Campus PO Box 261966, Conway, SC 29528-6066

843-349-5212 Jacquelyne.Snyder@hgtc.edu