INSTRUCTIONAL PACKAGE

FOR-240

Mapping & Photo Interpretation

Effective Term
Spring 2019

INSTRUCTIONAL PACKAGE

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: <u>Spring 2019</u>

COURSE PREFIX: FOR-240   COURSE TITLE: Mapping & Photo Interpretation

CONTACT HOURS: 2 Lecture, 3 Lab   CREDIT HOURS: 2-3-3

RATIONALE FOR THE COURSE:
Forestry is a profession dealing with the management of land resources. Effective management requires understanding the spatial distribution or location of resources (timber, grass, water, roads, etc.). This course focuses on the manipulation of information in the form of maps, aerial photography (black and white, color and color infrared), Global Positioning Systems (GPS) and Geographic Information Systems (GIS). These skills are fundamental for managing resources for the benefit of timber production, wildlife management, etc.

COURSE DESCRIPTION:
This course is a study of the mechanics of mapping forest lands with emphasis on the use of aerial photographs. It includes calculation of land area by transit, dot-grid, and polar planimeter methods as well as taking measurements and identifying objects from aerial photographs.

PREREQUISITES/CO-REQUISITES:
(Credit level FOR 106 Minimum Grade of D or Credit level FOR 106 Minimum Grade of TC)

REQUIRED MATERIALS:
No textbook required. Various handouts will be provided by the Instructor. Required Equipment: Drafting Kit from FOR-118, Engineer's scale ($5), calculator ($10) and flash drive ($10).

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.

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*:

Module #1
Materials Covered: Basic Mapping Techniques

*Assessment(s):   Weekly skill based labs
                      Complete class review activity.
                      Unit Test

Learning Outcomes:
1. Student will learn about different kinds of aerial photos, and imagery and data from satellites, LIDAR and SLAR.
2. Student will be introduced to aerial photo history.
3. Student shall learn how to make photo scale determination and how to determine line bearings and distances from photos.
4. Student will learn how to orient photos for stereoscopic viewing.
5. Student will be introduced to photo interpretation.
6. Student shall review drafting techniques previously learned and will employ same on all map drawing exercises.

Module #2

Materials Covered: Timber Typing and Feature Identification

*Assessment(s):   Weekly skill based labs
    Complete class review activity.
    Unit Test

Learning Outcomes:
1. Student will learn how to identify timber types and drainage locations on aerial photographs.
2. Student will be able to interpret land usage patterns observed on aerial photographs.
3. Student shall take measurements on scaled photographs and compare with measurements on maps for photo scale determination.

Module #3

Materials Covered: Determining Heights and Modeling Tree Diameters from Crown Sizes.

*Assessment(s):   Weekly skill based labs.
    Complete class review activity.
    Unit Test

Learning Outcomes:
1. Student shall draw maps using measurements taken from aerial photographs.
2. Student will practice stereoscopic viewing and photo interpretation.
3. Student will learn procedure for determining heights from aerial photos.

Module #4

Materials Covered: GPS and GIS Operation

*Assessment(s):   Weekly skill based labs.
    Complete class review activity.
    Unit Test

Learning Outcomes:
1. Student will learn how to determine property ownership from public land records.
2. Student will learn how to use GPS equipment.
3. Student will learn application of GIS in forestry and natural resource work (fGIS and ARCGIS 10.5).

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

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%
Lab Reports & Field Work	40%
Final Exam	20%
	100%

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

GRADING SYSTEM:
This course follows the College's 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.**

This course will follow the College's 80% attendance policy. The course is made up of 2 Lecture hours per week and 3 Lab hours per week. Students who miss any combination of missed hours exceeding 20% of the scheduled class / lab time will be dropped from the course with a W or a WF. Students missing a lab session are encouraged to join another section if possible to stay current.

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:
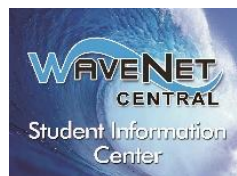
1. **Getting around HGTC**: General information and guidance for enrollment!
2. Use the **Online Resource Center (ORC)** for COMPASS support, technology education, and online tools.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials 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.

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.

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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 *Title IX Coordinator* 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** *Section 504, Title II, and Title IX Coordinator* Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu