Environmental and Natural Resources II Course # 6852

**Instructor:**

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 **School Phone:** (980) 434-6900

**Description:** This course provides an introduction to environmental studies, which includes topics of instruction in renewable and non-renewable natural resources, history of the environment, personal development, water and air quality, waste management, land use regulations, soils, meteorology, fisheries, forestry, and wildlife habitat. Skills in biology and algebra are reinforced in this class. Work-based learning strategies appropriate for this course are agri-science projects, field trips, shadowing, and supervised agricultural experience. Supervised agricultural experience programs and FFA leadership activities are integral components of the course and provide many opportunities for practical application of instructional competencies.

Course Goals: **Through the course work instructors will enhance the experiences of teamwork, leadership and career ready skills.**. The units of instruction cover topics of interest in the many areas association with environmental and natural resources. The course examines the technical aspects of environmental and natural resources as well as the recreational opportunities in the natural resources industry. The study of soils, water, forestry, and wildlife afford students the opportunity to explore management practices that affect the environment. In addition, the course places an emphasis on the importance of managing our natural resources for the mutual benefit of both humans and the environment.

“Hands on” activities are suggested throughout the course so students can learn more directly about some

of the job responsibilities associated with careers in the environmental and natural resources industry.

**All students are required to obtain NC Wildlife Hunter’s safety certification and one advanced certification offered by NC Wildlife. A copy of the certification shall be given to Mr. Hess for records.**

**Expected Student Learning Outcomes**: Upon completing the Environmental and Natural Resources II course, students should be able to: Pass the summative assessment (VoCats) with a minimum score of 88%. Be career ready and have completed and submitted a completed SAE project.

**Types of Assignments:** Hands on, Performance, technical writing, Daily class work, Speaking, SAE project.

**Supervised Agricultural Experience Program (SAE):** SAE is a planned, practical activity conducted outside of class time in which students develop and apply agricultural knowledge and skills. Examples may include starting and running an agricultural related enterprise, placement into an agribusiness occupation,

 **Guidelines for Term Grading:** Term grading will be completed through class work, performance, participation, and project rubrics. No one item or division will be weighted, open ended scoring will occur.

 **Absence Policy:** May not miss more than 6 days for this course. It is the responsibility of the student (and not the teacher) to acquire and make up work missed during an absence. If you miss class on the day of an exam or quiz you will be responsible for scheduling a make-up with the teacher.

**Student Organization (FFA):** All students are highly encouraged to participate in the FFA Organization.  Some opportunities offered by the FFA are local activities, career development events, travel and awards.  The local chapter meets every other Thursday with a banquet in May.  FFA dues are $20.00 per student per year.

**Course Outline:**

 **LEADERSHIP DEVELOPMENT**

* + FFA
	+ Parliamentary Procedure
	+ Public Speaking
	+ Major components of leadership for successful employment
	+ SAE
	+ Record Keeping

 **FORESTRY**

* + Summarize information about common tree species, insects and diseases that occur in North Carolina
	+ Examine management practices related to forestry production as recommended by NCDFR.

 **NATURAL RESOURCES RECREATIONAL OPPORTUNITIES**

* + Examine basic procedures involved in camping.
	+ Apply principles of hunting and firearms safety.
	+ Examine basic principles of freshwater fishing.

 **SOIL AND LAND RESOURCES**

* + Apply practices related to classifying soils according to their potential agricultural and urban use.
	+ Examine soil conservation management practices that affect land use planning in rural and urban areas.
	+ Demonstrate the ability to properly sample soils and evaluate test results.
	+ Proper soil conservation practices

**WATER RESOURCES AND THE ENVIRONMENT**

* Discuss the properties of water
* Analyze water quality issues
* Discuss the important characteristics and classification of wetlands

 **WILDLIFE**

* Discuss factors related to the management of animals
* Examine characteristics of animal species

**SUSTAINABLE AGRICULTURE**

* Explore the importance of and practices involved in sustainable agriculture

**ENERGY SOURCES**

* Summarize terms and concepts related to energy

**FISHERIES**

* Investigate factors involved in planning and establishing an aquaculture facility.
* Establish an aquaculture facility that produces economically beneficial species of fish

 **CAREERS IN NATURAL RESOURCES AND THE ENVIRONMENT**

* + Examine careers related to natural resources and the environment.

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I have read and understand the course outline, expectations, consequences and grading policy for Horticulture I. I also give permission to utilize any photos taken during class or while participating in FFA events for bulletin board, FFA website, or any other positive promotion of our students and our FFA Chapter.

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 *Student Signature and Date Parent Signature and Date*

I look forward to an exciting semester! John M. Hess – Agriculture Teacher