



Steeleville High School Agriculture Department
Environmental Biology/Science
1st Period



Course Syllabus

Instructor: Mrs. McKinnies

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Pre Pre-requisite: Introduction to Agriculture

Level: 10th, 11th, & 12th

Credit: 1 credit

Environmental Science is a course that examines the complexity of relationships found in the natural environment. This course provides students a practical hands-on learning experience that prepares students to become environmental stewards of the land. Students must first complete Biology in order to enroll in this course. **This course is one year in length** and upon successful completion with a D or higher, 1 graduation credit will be awarded. This course will count towards required science credit for graduation.

Course Description

Environmental Science examines the complexity of relationships found throughout the natural environment. The impact of plant and animal production practices on the environment and the adoption of practices leading to improved air, land, and water quality are investigated. Furthermore, students will examine past and current human interaction with the environment. Topic clusters in this course include an introduction to environmental science & natural resources, ecology, southern Illinois ecology, populations, soil & water conservation, mineral & energy resources, agricultural & environmental policy, and fish & wildlife management. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Course Objectives/Goals

- Students will examine interrelationships found in the environment.
- Students will be able to explain agricultural influences on the environment at the state, national, and global scale.
- Students will explore potential careers in natural resources and environmental science.
- Students will be able to understand and apply practices in managing air, soil, and water conservation.
- Students will be able to describe prairie, timber, & wetland ecosystems.
- Students will design, construct, and manage habitat areas for southern Illinois wildlife.
- Students will be able to discuss agricultural and environmental policies and their role in environmental health.
- Students will develop and maintain a Supervised Agricultural Experience (Science Experiment) that pertains to natural resources & environmental interest.

Student Expectations

It is important that students in this class keep an open mind and respect the differences in student ability, backgrounds and beliefs. All students are expected to come to class on time, be prepared, and participate on a daily basis. Students will be expected to follow all rules listed and described in the Steeleville High School Student Handbook. It is expected that students wear appropriate attire (safety glasses, closed-toe shoes, protective clothing, etc.) during shop/outside work.

Teaching Methods

Environmental Science is a course taught through a wide variety of teaching methods, but with a dominant focus through hands-on learning. Students will learn through class lecture, small group discussion, class debate, laboratory exercises, video, readings, independent study, games, guest speakers, and both individual and group projects.

Assessments

Students will be assessed through regular completion of homework, projects, class participation, and labs. Quizzes will assess students throughout each unit and a test will be given upon completion of each unit.

Grading Policy

Assignments will vary in points.

The school's standard grading scale will be used in the class

A	89.5% - 100%	B	79.5 – 89.4%	C	69.5% - 79.4%
D	59.5% - 69.4%	F	<59.4%		

Missed/Late Work

Late homework assignments will automatically be dropped 25%, unless prior arrangements have been made or the missed assignment was due to an excused absence. Missed quizzes or tests due to an unexcused absence will result in a zero. Make-up dates will be allowed for all quizzes and tests missed due to an excused absence.

Academic Honesty

Academic integrity is a vital component for individual success within Steeleville's Agriculture Department. Plagiarism and cheating by any student will result in a zero for the grade of the assignment and will follow punishment described in the student handbook.

Text

A variety of text material will be given in this course. The primary text material will be the textbook Environmental Science 2004, written by Karen Arms. In addition, MyCaert Agriculture Education State Curriculum readings will be provided. Text material will also include, but is not limited to, various textbook chapters, newspaper clippings, pamphlets, Internet articles, news articles, and short narrative briefs.

**The Order of Units and Modules are subject to change. Students will be given a notice

Unit 1: What is Agriculture?	
Module 1:	Opportunities in FFA
Module 2:	Achievement in FFA
Module 3:	Leading the FFA Chapter
Module 4:	SAE's: Types, Keeping Records, and Implementing
Unit 2: Natural Resources	
Module 5:	Exploring Natural Resources
Module 6:	Understanding Human Impact on Natural Resources
Module 7:	Exploring Careers in Natural Resources
Module 8:	Understanding Recycling and Why it is important
Unit 3: Soil	
Module 9:	Understanding the Importance of Soil
Module 10:	Soil Color
Module 11:	Soil Texture and Structure
Module 12:	Soil Profile
Module 13:	Land Use CDE Preparation
Unit 4: Water	
Module 14:	Understanding the Water Cycle and Its Importance
Module 15:	Determining Uses of Water
Module 16:	Water Sources and Quality Standards
Module 17:	Identifying and Reducing Water Pollution
Unit 5: Air	
Module 18:	Defining Air Pollution and Its Effect on Humans
Module 19:	Examining Industrial Air Pollution
Unit 6: Prairies	
Module 20:	Defining Prairies
Module 21:	Understanding the Importance of Prairies
Module 22:	Exploring Prairie Ecology
Module 23:	Establishing Prairies
Module 24:	Maintaining Prairies
Unit 7: Animal Science	
Unit 8: Wetlands	
Module 21:	Exploring Wetlands
Module 22:	Determining the Importance of Wetlands
Module 23:	Establishing Wetlands
Module 24:	Maintaining Wetlands
Module 25:	Wetlands Near Us
Unit 9: Conservation	
Module 24:	Importance of Wildlife Conservation
Module 25:	Identifying Problems caused by wildlife
Module 26:	Conserving Wildlife and Wildlife Habitat Project

Online Learning Expectations for Students Choosing to Remote Learn

- Students are required to sign in daily and participate in classes from 8:13 – 2:30 p.m.
- Teachers will be engaging with in-person students as well as remote learners throughout the day.
- Daily/hourly attendance will be taken and if a student does not sign in and participate he/she will be counted absent and fall under attendance guidelines as outlined in the handbook.
- Parents must be available to communicate with administration and teachers via email or telephone; this is on an as-needed basis.
- Teachers are expected to use Google Meets to livestream their classes with the camera not facing students
- When the instructor is speaking, keep your mic muted.

Students Quarantined

- Students will participate in remote learning if medically able
- Paper copies will be sent home as needed