

Environmental Science Syllabus

Fall 2020-2021

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Welcome to Environmental Science!

I. Course Description

This course consists of one semester of Environmental Science. Various “study of life” units from *Nature Unbound* and Aldo Leopold’s *A Sand County Almanac* will be used. Environmental Problems and Solutions, Earth’s Ecosystems, Cycles of Nature, and Interaction of Living things will be covered.

II. Course Curricular Objectives

Upon Completion of Environmental Science, students will gain knowledge of the following:

- Diversity among species increases the chance of survival in a changing environment
- Different species occupy separate niches to maintain the stability of an ecosystem
- Human decisions can alter the stability of an ecosystem
- Diversity of Missouri flora and fauna
- Environmental problems and solutions

III. Course Materials

Students will be using their chromebooks nearly every day in Environmental Science and need to bring them to class everyday fully charged. We will use Google Classroom as our learning platform on which some assignments will be posted and turned in. Other assignments are still paper based. We will be using the books *Nature Unbound*, by MDC, and *A Sand County Almanac*, by Aldo Leopold. The students will also be provided with other materials that review or enrich the content presented in class.

IV. Course Policies

A. Behavior:

Students will respect the rights of others in the classroom, and the school’s equipment and facilities. All students will be required to pass a safety quiz and return a signed safety contract (student and guardian) in order to participate in labs. It is a privilege to do labs. They help to make learning meaningful, fun and exciting. For safety reasons, a student who behaves inappropriately during labs will not be allowed to finish the lab. If horseplay is involved, the student potentially endangers other students in class and will be referred to the office. Electronic devices will be used for academic purposes only. Students will be using chromebooks on a regular basis and will be expected to use all technology appropriately and responsibly. The cell phone policy will be strictly enforced in Environmental Science.

B. Other Items of Interest:

1. You will need a composition notebook for class.. All work, notes, etc. will be placed in it. Bring your notebook everyday.
2. Please take care of personal errands before class begins (restroom, locker, office, drink, etc.). Also, be in your seat ready to work when the bell rings.
3. We will have a seating arrangement.
4. Food and drink are not allowed in the science room. Bottled water is allowed.
5. Hoover’s Law of Neatness – “IF I can’t read it, I won’t grade it.”
6. When submitting work please title your paper with the name of the assignment, date, page and of

course, YOUR NAME.

C. Absences:

Daily attendance is strongly recommended in this course (and all other courses). Makeup privileges will be as follows:

- If you are absent due to a school function (extracurricular activities, field trips, etc.), you are expected to get your assignments PRIOR to your leave and complete them by the due date. It will be your responsibility to come in for any additional help as needed before/after school to get the work done on time.
- If you have an excused absence, (not due to a school function), you are expected to see me before or afterschool on the day you return to pick up all makeup work. Do not expect assignments to be given to you during valuable class time. Students must have makeup work completed by the time they take the associated unit test. No makeup work will be accepted after the unit test.
- All makeup tests will be given before or after school and may not be the same tests as given to other students.

D. Testing:

Students need to learn how to effectively study and take tests. Students often do not know the difference between “recognizing” a concept and “knowing” it. Students are usually well trained to recognize answers when given test banks or sets of possible answers, but are sometimes unable to generate complete answers in writing, which requires that they know the material. To help students make this transition, students will be allowed to retake written sections of a unit test if they receive less than a 70% on that section. The student must meet two criteria to be eligible for a retake: 1.) the student must have all assignments turned in on time 2.) the student must come in to go over their previous test prior to taking the retake. The maximum score the student can receive is a 70% on the retake. This privilege is used at the teacher’s discretion.

E. Lab Policy:

Students are expected to do all lab activities. If a student is absent or does not complete the work in class he/she must come in before or after school to complete the assignment. Even if lab work is done in pairs or small groups, each individual is expected to turn in his/her own work unless told otherwise. Data can be shared, not the interpretation of the data. Plagiarism will not earn credit.

F. Academic Dishonesty:

Cheating on tests or homework will result in:

- A zero grade for the entire test or assignment.
- Parental notification if caught cheating on a test or assignment
- Notification to the principal if caught cheating on a test.

V. Grading Policy/Assessment

A. Grading Scale

The grading scale for the course is:

96-100	A	73-76	C
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90-95	A-	70-72	C-
87-89	B+	67-69	D+
84-86	B	63-66	D
80-83	B-	60-62	D-
77-79	C+	Below 60	F

VI. Course Procedures

- Students need to be in their seats when the bell rings and begin working on the daily opener question.
- Environmental Science class is to be used for the study of Environmental Science. You will not be allowed to work on homework from any other class unless your Environmental Science work is complete. Any homework from other classes that is out when you should be working on Environmental Science will be confiscated.
- Labs need to be cleaned up appropriately before the end of class bell rings. There should be no used paper towels or lab materials left on the floor or counters, the sinks and strainer should be clean, and lab equipment returned to the proper place.
- Students must be in their seats at the end of class in order to be dismissed. The teacher will dismiss the students, not the bell.

VII. Additional Information

My intent is to help all students be successful and to facilitate a positive learning environment. I am easy to get along with, but I have high expectations for all of my students. I will not accept anything less than your best and you shouldn't either. I am at school by 7:30 a.m. and stay until at least 4:30 p.m.; I am willing to stay later if a student needs help. Don't hesitate to ask for help or to discuss grades! Communication is key.

I provide students with printed and highlighted grade reports per unit, indicating progress and missing work. Lumens is updated weekly. Please feel free to contact me by email anytime or by phone before or after school.

The course code for Google Classroom is _____. Please refer to daily announcements for practice, notes, classwork and homework.

VIII. Units of Study (changes are made at the discretion of the instructor)

Unit 1 What is Ecology?

- Levels of organization
- Introduction to Aldo Leopold
- Entomology Project

Unit 2 Reproduction & Adaptation

- Sexual and Asexual reproduction
- Adaptation and natural selection
- Trees of Missouri Project

Unit 3 Populations

- Checks and balances
- Carrying capacity
- Birds of Missouri Project

Unit 4 Interactions Among Organisms

- Competition
- Symbiosis
- Maintaining balance

Unit 5 Extinction

- Mass Extinctions
- Consequences of extinction
- Endangered species in MO

Unit 6 Energy Flow in Ecosystems

- Modeling energy flow
- Trophic cascades
- Mammals of MO Project

Unit 7 Cycling of Elements

- Nutrient cycles
- Human Influences
- Aquatic ecology

Unit 8 Diversity and Disturbances

- Biodiversity
- Succession

Environmental Science

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Student and Parent
Signature Form:

I _____ (student
name),

have read and understand the course expectations, prerequisites, recommendations

and policies outlined in this syllabus. My signature indicates that I will use classroom
resources

with respect and understand and will comply with course policies as I put forth my best efforts to

be successful in this
class.

I _____ (parent
or

guardian), have read and understand the course expectations, prerequisites,
recommendations

and policies outlined in this syllabus.