FVS Environmental Science B Syllabus

Course Description
Environmental science is a captivating and rapidly expanding field, and this two-semester course offers compelling lessons that cover many different aspects of the field: ecology, the biosphere, land, forests and soil, water, energy and resources, and societies and policy. Through unique activities and material, high school students connect scientific theory and concepts to current, real-world dilemmas, providing them with opportunities for mastery in each of the segments throughout the semester.

Course Objectives
Throughout the course, you will meet the following Georgia Performance Standards https://www.georgiastandards.org/standards:

- **SEV1.** Students will investigate the flow of energy and cycling of matter within an ecosystem and relate these phenomena to human society.
  - o a. Interpret biogeochemical cycles including hydrologic, nitrogen, phosphorus, oxygen, and carbon cycles. Recognize that energy is not recycled in ecosystems.
  - o b. Relate energy changes to food chains, food webs, and to trophic levels in a generalized ecosystem, recognizing that entropy is a primary factor in the loss of usable food energy during movement up the trophic levels.
  - o c. Relate food production and quality of nutrition to population growth and the trophic levels.
  - o d. Relate the cycling of matter and the flow of energy to the Laws of Conservation of matter and energy. Identify the role and importance of decomposers in the recycling process.
  - o e. Distinguish between abiotic and biotic factors in an ecosystem and describe how matter and energy move between these.

- **SEV4.** Students will understand and describe availability, allocation and conservation of energy and other resources.
  - o a. Differentiate between renewable and nonrenewable resources including how different resources are produced, rates of use, renewal rates, and limitations of sources. Distinguish between natural and produced resources.
  - o b. Describe how technology is increasing the efficiency of utilization and accessibility of resources.
  - o c. Describe how energy and other resource utilization impact the environment and recognize that individuals as well as larger entities (businesses, governments, etc.) have impact on energy efficiency.
  - o d. Describe the relationship of energy consumption and the living standards of societies.
  - o e. Describe the commonly used fuels (e.g. fossil fuels, nuclear fuels, etc.) and some alternative fuels (e.g. wind, solar, ethanol, etc.) including the required technology, availability, pollution problems and implementation problems. Recognize the origin of fossil fuels and the problems associated with our dependence on this energy source.
  - o f. Describe the need for informed decision making of resource utilization. (i.e. energy and water usage allocation, conservation, food and land, and long-term depletion)

- **SEV5.** Students will recognize that human beings are part of the global ecosystem and will evaluate the effects of human activities and technology on ecosystems.
  - o c. Explain how human activities affect global and local sustainability.
  - o d. Describe the actual and potential effects of habitat destruction, erosion, and depletion of soil fertility associated with human activities.
  - o e. Describe the effects and potential implications of pollution and resource depletion on the environment at the local and global levels (e.g. air and water pollution, solid waste disposal, depletion of the stratospheric ozone).
warming, and land uses). Of f. Describe how political, legal, social, and economic decisions may affect global and local ecosystems.

**Student Expectations**
This course requires the same level of commitment from you as a traditional classroom course would. Throughout the course, you are expected to spend approximately 1 hour per day online working on the following activities:
- Interactive lessons that include instructional videos and tasks
- Assignments in which you apply and extend learning in each lesson
- Assessments, including labs, quizzes, tests, and cumulative exams Remember - you are trying to LEARN and UNDERSTAND from what you are doing. Do what you need to do to help (i.e. take notes, outline, etc.) - don’t just rush through the material. Ask questions when you don’t understand something.

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**Grading Policy**
You will be graded on the work you do online and the work you submit electronically to your teacher. The weighting for each category of graded activity is listed below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>15%</td>
</tr>
<tr>
<td>Lesson Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Unit Tests</td>
<td>20%</td>
</tr>
<tr>
<td>Essays</td>
<td>N/A</td>
</tr>
<tr>
<td>Labs</td>
<td>10%</td>
</tr>
<tr>
<td>Projects</td>
<td>30%</td>
</tr>
<tr>
<td>Other Assignments</td>
<td>N/A</td>
</tr>
<tr>
<td>Cumulative Exam</td>
<td>15%</td>
</tr>
</tbody>
</table>
All of the grades that you receive online will be recorded in Edgenuity. To view your grades in Edgenuity, click on: organizer; reports; then, scores and feedback.

**Fulton County Schools Grade Recovery Policy**

Opportunities designed to allow students to recover from a low or failing cumulative grade will be allowed when all work required to date has been completed and the student has demonstrated a legitimate effort to meet all course requirements including attendance. Students should contact the teacher concerning recovery opportunities. Teachers are expected to establish a reasonable time period for recovery work to be completed during the semester. All recovery work must be directly related to course objectives and must be completed ten school days prior to the end of the semester.

**Due Dates**

The Fulton Virtual School’s policy is to allow students to work at an individualized pace in the course. You are expected to work at your own pace and have the course finished by the last day of the class. You are expected to show the same level of commitment as you would in your traditional school setting.

**Scope and Sequence**

When you log into the Virtual Classroom, you can view the entire course map, which provides a scope and sequence of all topics you will study. Clicking a lesson’s link in the course map leads to a page listing instructional activities, assignments, and learning objectives specific to that lesson. The units of study are summarized below.

- **Unit 1**: Human Uses of Land
- **Unit 2**: Human Impact on Water Resources
- **Unit 3**: Understanding Natural Resources

**Georgia Performance Standards**

This course is correlated to the Georgia Performance Standards. If you would like more information on the GPS, please visit:

Fulton Virtual School Academic Integrity Policy

In a virtual learning environment, honesty and integrity are integral traits for academic success. At Fulton Virtual, we believe that all students must show integrity in the completion and submission in all aspects of the academic experience. Therefore, no forms of cheating, assisting others in cheating, and/or plagiarism (passing off the work of others as if it is your own) will be tolerated.

When collaboration is necessary to complete tasks and projects, Fulton Virtual School instructors will provide students with advance notice. Thus, all work is considered an individual assignment unless otherwise noted. The following list of dishonest behaviors has been compiled to assist you. This list is by no means exhaustive, and each infraction of academic dishonesty will be handled the virtual instructor on an individual, case-by-case basis.

*Dishonest behavior includes, but is not limited to:*

1. Plagiarism. Plagiarism can be defined as the inclusion of another’s ideas, words, expressions, or data in writing or presentation without properly acknowledging the source.

2. Unauthorized use of another person’s password/login. Student logins/passwords are confidential information that should not be shared with others.

3. Cheating. Cheating can be defined as the act or attempted act of deception by which a student seeks to misrepresent his submitted work as uniquely his own completed without assistance. Cheating includes copying another student’s work and submitting it as your own.

4. Impersonation. Performing work or taking an examination for another student or allowing someone to do so for you.

5. Falsification and/or misrepresentation of data. This can be defined as the submission of false or contrived data or sources.

6. Computer crimes. This may include damaging computer programs, hacking, constructing viruses, introducing viruses into a system, copying programs, etc.

*Academic dishonesty will result in one or more of the following actions:*
• Loss of grade points
• Removal from the course
• Failure to receive credit for the course
• Loss of eligibility to earn credits through Fulton Virtual Schools

Fulton Virtual School instructors have the authority to require that students perform other tasks or undergo additional assessments in proctored situations. If a Fulton Virtual School instructor suspects that there is a problem with academic integrity, the administrators of both the local school and Fulton Virtual School will be informed. Failure to follow these guidelines may result in removal from your virtual course without further warning.

All Fulton Virtual Students Must Agree and Adhere to the Following Academic Integrity Guidelines:

• I understand and will support and will abide by the guidelines set for in the Fulton Virtual School Academic Integrity Policy.
• I will not personally cheat (i.e., use unauthorized materials in completing my assignments and assessments), and I will not help others cheat.
• If I become aware of anyone else’s cheating or use of unauthorized materials (or any other violations of Fulton Virtual School’s Academic Integrity Policy, I have a personal responsibility to report the matter to an instructor or administrator.