

## **Ecology**

**Teacher: S. Sirrena Wiggins**

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423-727-2620 (available from 7:50-9:40)

I am available before and during first period planning. If you would like to schedule a time after school, please let me know. My email is a great way to reach me and I will respond within 24 hours.

### **Course Description:**

Environmental investigation, awareness, and knowledge are emphasized. Topics include relationships, pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal, technological, and individual action in order to protect the natural environment is stressed.

### **Course Objectives:**

1. Understand scientific inquiry, create claims, and the ability to conduct inquiry.
2. Evaluate engineering & scientific discoveries which help develop current technologies.
3. Classify analyze, and understand individual organism as the basic unit of ecology.
4. Analyze and explain examples of populations limited by natural factors, humans or both.
5. Evaluate and explain ecological niches.
6. Compare, contrast, and understand the relationship between an ecosystem and a physical environment.
7. Evaluate, compare and contrast the major terrestrial biomes.
8. Investigate how human activities have reduced the earth's biodiversity.

Specific course standards can be found online at:

[http://www.tn.gov/assets/entities/education/attachments/std\\_sci\\_3255.pdf](http://www.tn.gov/assets/entities/education/attachments/std_sci_3255.pdf)

### **Student's Responsibility**

Work diligently & complete assignments on time  
Be respectful of others – Raise your hand  
Actively contribute to the learning activities  
Abide by JCHS Rules per JCHS Handbook

### **Instructor's Responsibility**

Evaluate students fairly and equally  
Be respectful of all students  
Create and facilitate meaningful learning  
Behave according to JCHS code of contact

### **Benefits:**

Increased knowledge, praise, and encouragement!

### **Consequences:**

First time – warning

Second time – Action plan and parental contact

Third time – Disciplinary referral to 1 block ISS

Fourth time – Office referral

## **Class Materials**

1. Paper, pencils, textbooks, homework, and notes are daily requirements.
2. Highlighter or colored pencils are optional for note-taking or organization.
3. Notebook – I recommend a three-ring binder to keep notes and assignments organized.
4. Yourself – with an awake mind, ready to learn, and a good attitude!

## **Tests:**

Test will be given upon completion of each unit. Make-ups are given before or after school, unless you request or schedule another time. Please strive to make-up tests within one week.

Retakes of tests are available during the same 9-weeks. Original test should be corrected and re-submitted and retake scheduled within two weeks of original test. Midterms, EOCs, & final exams may not be retaken.

## **Make-up Work:**

Students may see instructor for make-up work upon their first day back to collect missed assignments and gather hand-outs or other class material. All make-up work is due as soon as possible and at least three days before the end of each 9-weeks.

## **Projects:**

Students will be responsible for two projects – one project for each 9-weeks.

## **Grading Scale**

A: 93 – 100

B: 85 – 92

C: 75 – 84

D: 70 – 74

F: 0 – 69

## **Composure of grades**

test/projects – 40%

quizzes/classwork – 30%

midterm/final – 15%

homework/notebook – 15%

## **Academic Integrity:**

“An essential feature of JCHS is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a JCHS student, I pledge that I will neither knowingly give or receive and inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.”

**Course Outline:**

<b>Week</b>	<b>Unit</b>	<b>Topic</b>
August 7-10	Welcome & Introduction	Course Introduction
August 13-17	Individuals	Classifying organisms & investigating biodiversity
August 20-24	Individuals	Energy, animal behavior, & plant tropism
September 3-7	Populations	Population limitations
September 10-14	Populations	Population growth patterns and rates
September 17-21	Populations	Natural selection
September 24-28	Communities	Ecological niches & habits
October 1-5	Communities	Competition, predation, & symbiosis
October 8-12	Communities	Biomass analyzation
October 22-26	Ecosystems	Energy flow
October 29 <sup>th</sup> -November 2 <sup>nd</sup>	Ecosystems	Bio geochemical cycles
November 5-9	Ecosystems	Ecosystem stability
November 12-16	Biomes	Climate and biomes
November 19-23	Biomes	Terrestrial biomes & impacts
November 26-30	Humans and Sustainability	Sustainability
December 3-7	Humans and Sustainability	Biodiversity & environmental impacts
December 10-14	Unit projects	*project presentations
December 17-21	Final exams	