Jefferson County High School
Course Syllabus

A. Course *Applied Environmental Science*

B. Department *Agriculture*

C. Course Description *Applied Environmental Science focuses on the science and management of wildlife and forestry ecosystems. Topics include environmental impacts, energy consumption, and ecosystems management. This course satisfies one laboratory science credit.*

D. Grade Term : First Semester

E. Grading Scale

Range		Honors/ Regular	College-Level	A.P.
93-100	A	4.0	4.5	5.0
85-92	B	3.0	3.5	4.0
75-84	C	2.0	2.5	3.0
70-74	D	1.0	1.5	2.0

F. Term Dates

a. 1st 9 Weeks August 5, 2016 – October 7, 2016
b. 2nd 9 Weeks October 8, 2016 – December 16, 2016
c. 3rd 9 Weeks January 5, 2017 – March 15, 2017
d. 4th 9 Weeks March 16, 2017 – May 25, 2017

G. Textbook(s): *Wildlife and Natural Resource Management*
Introduction to Forestry Science

H. Other Resources

a. Odysseyware
b. *ICEV online*

I. Major Assignments

a. Notebook
b. Projects

J. Procedures for Parental Access to Instructional Materials

a. Aspen Parent Portal
b. Instructor's Website
c. Email Instructor
d. Parent Teacher Conference

a. There are two designated conference dates during the school year. Parents who would like to request additional meetings may make appointments for conferences with the teachers (during their planning periods), counselors, or a principal by telephoning the school office.

K. Field Trips

a. Any schedule fieldtrip will have a definite educational purpose and will reflect careful planning. Signed permission forms will be obtained when an off campus trip is planned.

L. Standards & Objectives

1. Occupational Awareness and Safety: Standards 1-2 : I can;
   a. Investigate occupations in environmental science.
   b. Compare and contrast the education, skills, and abilities necessary for employment.
   c. Demonstrate safety procedures for tool and equipment operation.
   d. Complete a safety test with 100 percent accuracy.
2. Studying the Environment: Standards 3-5 : I can;
   a. Analyze the scope and impact of contemporary environmental science.
   b. Compare and contrast the science of biology, chemistry, earth science and physics related to environmental science.
   c. Research academic journals focused on biophysical environment.
   d. Define the term biome
   e. Compare and contrast each biome.
3. Human Impact on the Environment: Standards 6-7; I can;
   a. Research the evolving impact of humans on the environment.
   b. Analyze specific events of both positive and negative impacts on the environment.
   c. Synthesize data to compare U.S. population statistics to other countries.
   d. Compare the factors that impact population growth.
4. Energy Consumption: 13-15 ; I can;
   a. Distinguish between renewable and nonrenewable resources.
   b. Analyze energy resources in the U.S.
   c. Compare energy consumption in the U.S to other countries.
   d. Create and implement a plan to reduce personal energy use.
5. Ecosystems: Standards 8-12: I can;
   a. Analyze the components of an ecosystem.
   b. Develop a glossary of terms essential to the study of ecosystems.
   c. Compare and contrast the different types of ecosystems.
   d. Analyze how abiotic and biotic components of an ecosystem interact.
   e. Compare primary and secondary succession in a biome.
   f. Analyze the importance of biodiversity in an ecosystem.
   g. Asses how various land uses might impact biodiversity.
6. Managing Ecosystems: Standards 16-18 ; I can;
   a. Compare and contrast standard methods for monitoring a variety of environmental conditions.

b. Analyze sustainability as it applies to ecosystems.
c. Synthesize the components of a management plan as it relates to ecosystems.
d. Analyze integrated pest management (IPM) strategies.

7. Legal and Civic Responsibility: Standards 19-21: I can;
   a. Cite legislation and treaties of environmental regulations.
   b. Compare the roles of federal, state and local governments in enforcing environmental legislation.
   c. Compare and contrast current environmental issues.
   d. Analyze environmental and ethical implications to potential environmental issues solutions.

1st Nine Weeks

Occupational Awareness and Safety 5 days
Studying the Environment 15 days
Human Impact on the Environment 5 days
Ecosystems 20 days

2nd Nine Weeks

Energy Consumption 15 days
Managing Ecosystems 20 days
Legal and Civic Responsibility 10 days