DIAL Virtual Fundamental Natural Resources

18504

Instructor:

Mrs. Taylor Krause

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Suggested Grade Level: 9-12

Rationale Statement:

People depend on Natural Resources. Fundamental Natural Resources provides students with an overview of the planet's natural resource systems, along with examining those resources unique to South Dakota. Students will explore and develop a basic understanding of how the systems relate to one another other. Students will consider the roles people play in, and the occupations related to, managing, using, protecting, and conserving natural resources.

Standards:

FNR 1: Explain the importance of resource and human interrelations to conduct management activities in natural habitats.

FNR 1.1: Explain resource management components to establish or enhance relationships in natural resource systems.

FNR1.2: Apply Geographic Information System (GIS) skills to natural resource activities.

FNR 1.3: Examine planning data to determine natural resource status

FNR 1.4: Discuss weather and other criteria to recognize dangers related to work in the outdoor environment.

FNR 2: Interpret scientific principles of natural resource management activities.

FNR 2.1: Identify and classify plants and animal-based natural resources.

FNR 2.2: Identify natural cycles and related phenomena to describe ecologic concepts and principles.

FNR 2.3: Describe soil composition and properties.

FNR 2.4: Examine wetland, watershed and groundwater properties, classification and functions.

FNR 2.5: Discuss forestry management techniques.

FNR 3: Describe production practices and processing procedures for natural resources.

FNR 3.1: Describe how natural resource products are produced, harvested, processed and used.

FNR 4: Explain responsible practices to protect natural resources.

FNR 4.1: Describe techniques and equipment needed to manage and conserve natural resources.

FNR 4.2: Discuss animal and plant disease symptoms and prevention.

FNR 4.3: Recognize insect types and available controls to prevent insect infestation.

Topics Covered:

- Renewable vs. Nonrenewable Resources
- History of Natural Resource Preservation
- Habitat Destruction
- Ecology
- Soil
- Soil Erosion
- Water Quality and Supply
- Wetlands
- Interactions
- Endangered Species
- Fisheries
- Game Species
- Forest Management
- Surveying and Geographic Information Systems (GIS)

Technology Expectations:

Each student is expected to have access to a computer and internet to complete the course. Should something come up where the student does not have either of these things it is their responsibility to contact the instructor.

Performance Standards

Grades for the course will be based on the following levels of performance and attendance in class:

Grade	Performance Standard
A	**Mastered (Independent) Learner** Did research, designed and planned; applied academic skills; evaluated work and made adjustments; did quality work; needed little help from the teacher; sought found resources independently; demonstrated knowledge with a grade of 94% or higher; can perform course standards and skills independently with no supervision
B	**Semi-independent (Requires Some Supervision) Learner** Did research, designed and planned; needed some help from the teacher; did quality work with a few flaws; needed feedback from the teacher to realize work did not meet standards; redid work to meet standards; demonstrated knowledge and a grade of 87% or higher; can perform standards completely without supervision/training.
C	**Dependent (Requires Close Supervision) Learner** Needed help to research, design, and plan; relied a great deal on the teacher; had to be given procedures for performing tasks; required significant help to produce a quality product; needed help to evaluate a product; final product did meet standards; demonstrated knowledge with a grade of 79% or higher; can perform task with close supervision/training.
D	**Not Mastered Learner** Needed help to research, design and plan or had to be given a plan; relied a great deal on the teacher; had to be given procedures for performing tasks; required significant help to produce a product; needed help to evaluate a product; final product still did not meet standards; demonstrated knowledge with a grade of 70% or higher; requires close supervision and more instruction.
F	**Failure (No Exposure)** Did not complete projects; if projects were completed, they were of such low quality that they did not pass; failed to document procedures; did not show criteria for determining quality; scored 69% or less; not enough experience or knowledge in this area.

Grading Procedures:

All assignments/assessments are due on the Friday of that given week. This includes test, quizzes and other assignments. Assessments which include short answer questions will need to be hand graded by the instructor so the test score shown on google forms after taking the test is not accurate. Students can expect and accurate updated score by Friday of the following week. If students have any questions about grading, please e-mail the instructor directly at: taylor.krause@k12.sd.us

Course Outline:

Week	Unit	Assignments Due
Week One	Introduction Unit One	Goal Paragraphs Chapter One Assignment
Week Two	Unit One	Chapter Three Assignments Chapter Four Assignments
Week Three	Unit One	Unit One Test
Week Four	Unit Two	Chapter Five Assignment Chapter Six Assignments
Week Five	Unit Two	Unit Two Test
Week Six	Unit Three	Chapter Nine Assignments Chapter Ten Assignments
Week Seven	Unit Three	Chapter Twelve Assignments Unit Three Test
Week Eight	Unit Four	Chapter Thirteen Assignments Chapter Fourteen Assignments
Week Nine	Unit Five	Chapter Sixteen Assignments Unit Four and Five Test
Week Ten	Unit Six	Chapter Nineteen Assignments Chapter Twenty Quizzes
Week Eleven	Unit Six	Chapter Twenty-One Quizzes Unit Six Test
Week Twelve	Unit Seven	Chapter Twenty-Two Assignments Chapter Twenty-Three Assignments
Week Thirteen	Unit Seven	Chapter Twenty-Four Assignments Unit Seven Test
Week Fourteen	Unit Eight	Chapter Twenty-Eight Assignments
Week Fifteen	Final Test	Test Review
Week Sixteen	Final Test	Final Test

**The schedule is subject to change