Enduring idea: The relationship between people and nature is reciprocal.

Key concepts: Nature impacts human endeavors
   The human population affect natural systems
   People are part of an open system and must utilize nature for sustenance

Rationale: As human population steadily increases on Earth, the need for awareness and response to environmental issues has increased as well. Since we are part of an open system within other systems on this planet, human endeavors many times overlap with other natural processes. The resources we and other life systems depend on for survival can be adversely affected by our behavior (knowingly or unknowingly). Students must become aware of their place within a larger system and realize how equilibrium can be achieved and maintained.

Essential questions: What are environmental factors that affect people?
   How has the human population affected natural environments?
   How do other natural systems interact with each other?

Unit objectives: Students will understand how people affect other natural systems. Students will understand relationship between natural systems independent of human intervention. Students will understand how counteracting negative human impact may help sustain other natural systems.

Ephemeral Nature Study

Lesson objectives: Using the movie Rivers and Tides, students will identify time related processes in nature.
   Students will describe in writing how one system within an environment can effect another.

Materials/Supplies: Sketchpads/notebooks
   Pencils/pens
   DVD Rivers and Tides

Instructional Strategies: (10 min)
Students will be given the definition of the word ephemeral written on the board. Ask for some examples and list on the board next to the definition.

**Ephemeral = Fleeting. Lasting only a short while.**

Introduce the artist Andy Goldsworthy as an artist who works mostly outdoors and uses only natural found objects. Students will be asked to watch for examples of ephemeral events occurring in the movie.

Explain that a natural environment (like the beach) can be seen as made up of several systems. Give a comparison of an environment to the human body and ask if anyone can name a few of the systems that function together within the body.

- Circulatory, respiratory, nervous, etc.
- Explain how a beach may contain various systems that support it. –Tide, wind, sun, plant life, etc.-

Students will be asked to also watch for systems within an environmental landscape.

*(30 minutes)*

Play the movie

Ask students to give (verbally) examples of ephemeral events they saw in the movie and list on the board. Ask students to (verbally) identify some systems they observed within a particular environment.

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Derek Johnson  
ART 333  
Unit Lessons (10th-12th grade)

1. **Ephemeral Nature Study**

Lesson objectives: Using note, sketchpad, and/or cameras, students will observe and identify natural “wilderness” phenomena.

Students will describe a time related process in nature.

Materials/Supplies: Sketchpads/notebooks
Pencils/pens
Cameras

Instructional Strategies: (In previous class, students will watch the Andy Goldsworthy movie *Rivers and Tides.*)

Students bring sketchpads and/or cameras to local outdoor natural area.

(5-10 minutes)
Gathering at a common area, Students will be asked to observe at least one wilderness phenomenon and determine the relationship they observe between time and nature.

Explain that a “wilderness phenomena” may be any process occurring without the interference from people. Such as the moving of the sun across the sky, wind blowing the tall grass, water flowing over a rock bed or birds building a nest.

Remind students that events may be directly or indirectly observable (examples: melting ice, erosion, plant growth, falling rain, moving clouds, sunlight direction, etc)

Ask them to take as many detailed notes, sketches or pictures they can to describe what they are observing.

Students will be encouraged to find an area they find interesting and work alone. Let them know they will have 25 minutes for their observation.

(They should stay in sight of the group at all times.)
(Ask for some adult volunteers to assist in this field trip.)

Give students a verbal 5 minute warning when their time is nearly up. Have adult volunteers help call back students to the common area when time is up.

Ask several students to share with the group some of what they observed. (5 minutes)

Respond to observations with questions like:
How did the phenomenon affect other things? How did it make them feel? Were they tempted to change it or affect it in some way? Was it a long or short process? Did it have
more than one phase? How are processes in nature similar to man-made processes? How are they different? (10-15 minutes)

Ask students to write in their field notebooks a few sentences summarizing their observation based on some of the questions just asked.

Assessment: Students should be making detailed observations which include personal assessments of a contextual nature.

Derek Johnson
ART 333
Unit Lessons

Ephemeral Nature Sculpture Design

Lesson Objectives: Using sketchpad drawings, notes and photos taken from previous field trip, students will be asked to draw a designed installation sculpture either outdoors near the school grounds or inside the school somewhere (location must be approved by the teacher for safety).

Students will predict the permanence of their work on the environment.

Materials/Supplies: Previous sketchpad notes and drawings, photos

Instructional Strategies:

Define the term “ephemeral” for the class. Write it on the board and say it out loud.

Ephemeral= FLeeting. Lasting only a short while.

(5 min) Review the Andy Goldsworthy movie and ask students to give examples of ephemeral characteristics in his art.

(5 min) Ask students for examples from their own observations of something ephemeral.
(2-3 min) Explain the assignment will be to design a sculpture made only from nature-found objects.

The sculpture should represent something they found from their field observation and will be ephemeral.

Ask students to include the following information somewhere written on their design:

- Approximately how long will their work be active?
- Is it appropriate for indoor or outdoor installation?
- Where will they install work?
- What are the approximate measurements?
- What materials and quantity will be used?

Explain to students that they may use pencil and paper, marker or colored pencil to make sketches of their design.

Students should be working individually on design up to the last 10 minutes of class.

(5-10) Ask students to volunteer holding up works one at a time to show rest of class and have them give a brief description.

Assessment: Student’s design should contain necessary information to execute their sculpture. (size, placement, length of time) and should give some visual cues as to the nature of the process.

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Derek Johnson  
ART 333  
Unit Lessons

4. **Ephemeral Nature Collection**

Lesson Objectives: Students will collect objects from field site which best represent their design theme.
Students will organize materials to demonstrate the principles of their observations of a given nature-in-time theme.

Supplies/Materials: plastic grocery bags, reusable plastic containers w/ lids, cleaned out 5 gallon buckets, any other container.
Nature-found objects:
Sticks, mud, water, grass, stones, etc

Instructional Strategies: (30 min) Students will be asked to return to their observation field site and collect only nature-found objects to include in their sculpture (Nature-found objects include anything not man-made. Objects should not be uprooted, killed or otherwise harmed in the collection process).

Students will be asked to use objects that will be non-permanent. (no large rocks, trees, etc) Remind them that the goal for this assignment is show an observable natural process and one that will be somewhat short lived (from several minutes long to several days).

(15) Using their design created from previous class, students will return objects to class and begin organizing materials according to their specifications.

Some minor alterations to design may occur at this time.

Derek Johnson
ART 333
Unit Lessons

5. Ephemeral Nature Sculpture Installation

Lesson Objectives: Using nature found objects and previous field observation, students will create a sculpture that demonstrates the phenomena of natural process in time.

Students will reproduce the ephemeral quality of a natural phenomenon in nature.

Materials/Supplies: design notes
Various tools (hammer, knives, screwdrivers, etc.)
Nature-found objects

Instructional Strategies: Have students use designs and notes for reference when assembling sculpture.
Have students gather all objects and any other tools needed for installation and set up at their chosen sites.

Students will have the entire class period to begin and finish installation at their chosen location.

Teacher should visit each site frequently enough to assist in any technical/safety issues that may arise.

Sites should be free of access materials/tools and should be appropriately safe when finished.

Derek Johnson
ART 333
Unit Lessons

6. Reclamation Design 1

Lesson objectives: Using the earthworks of several pioneers in the Land Art movement, students will identify and list the distinguishable features.

Given minimal information about these works, the students will predict the function of the works in their environment.

Students will compare the use of artistic commentary on the environment through historical context.

Material/supplies: Slideshow/projector/screen

Instructional Strategies: (slide 1) Students will be shown image of wapiti Indian dwelling.

“Human populations always make an impact on their environment. There is no place on this earth where a large group of people have lived that did not somehow affect their environment.”

“This is a picture of an ancient native American dwelling. You will notice it is cut right out of the mountainside.”
They are hundreds of years old and you can still visit them today.”

“We are going to discuss the environment, how people impact systems within their environment and how artists make commentary on the relationships between people and their environment.”

Remind students that a system is a component of a larger environment (use example of human body systems from previous class)

“Remember in our previous class we talked about the systems within the human body such as the circulatory, nervous, respiratory, etc. What could be an example of a system within an environment?”

(5min) Students will be asked how people impact their environments.

“In what ways does the human population interact and affect the environment?”

“What are some harmful ways we do this? What are some helpful ways?”

Teacher will list on the board ways human populations impact their environment.

“The relationships between humans and environment have been subject of art throughout history. As artists have explored these relationships and systems, they make commentary on the impacts we have. Living in this age when asked to describe human impacts we most often think of harm. There are many neutral or positive outcomes. Wildlife preserves or control of runaway populations. So much art expresses distinct perspective on these relationships. Lets look at some classics you might have seen in history class.

(slide 2) (2-5 min) Students will be shown image of Kindred Spirits Ask students what they think the artist is trying to comment on in this piece.

Ask students “What is the relationship between the figures and the environment?”
“How is the environment portrayed?”

Points for teacher
Idealized treatment of landscape as a pristine wilderness disconnected to human population.
Figures are very small but elevated above the landscape.

(slide 3) Students will be shown American Progress and asked to identify the commentary.

“How is the relationship between the people and the environment portrayed differently in this work?”

Teacher will explain some of the key features and symbolism of this painting:

John Gast’s 1872 “American Progress” provides an excellent vehicle for discussion of Manifest Destiny. An angelic woman adorned with the “Star of Empire” and representing America floats from the east coast across the continent toward the Pacific. In her right hand she carries a schoolbook—a representation of enlightenment. Around her right elbow and delicately flowing through her left hand, are the telegraph wires that will connect the great nation. As she progresses, farmers plow the fields, the railroad and stage coach bring new settlers further west, and the Indians, buffalo, wild horses, and game animals flee—or are pushed—off the edge of the continent.

(slide 4) Teacher will show slides of Nancy Holt’s Sky Mound, Robert Smithson’s Broken Circle/Spiral Hill, and Mel Chin’s Revival Fields

“These are contemporary works that explore the same relationship.”

“What is your initial impression?
What are the challenges of critiquing these works?
What information do you feel you need to comment on the works?”
Some key information to help you is that all these pieces are considered reclamation art.

Students will be given some components of reclamation art. Teacher will write on the board and list out loud:

**Components of Reclamation Art…**
- Artist always makes a commentary on a population’s impact on an environment
- Artist manipulates the landscape
- Art serves to transform the population’s effects on an environment through direct physical change.

Teacher will compare each of the components to “traditional art” examples.

Ask students to determine the intention of the works.

(Slide 5) Show Sky Mound slide and explain the site was a 57 acre landfill closed over and covered with 18 inches of topsoil. Methane gas, formed from decomposing organic garbage, is collected in a recovery system and used as an alternative energy source. Large metal posts form a solar area in the center of the park to mark the summer and winter solstice and equinox. The artist, Nancy Holt redesigned the 100 foot area as a park for people and wildlife to enjoy.

Students will be asked how this could be defined as art. “What makes this art and not just digging a hole in the ground?”

(slide 6) Show revival fields and explain the artist’s statement. **Conceptually this work is envisioned as a sculpture involving the reduction process, a traditional method when carving wood or stone. Here the material being approached is unseen and the tools will be biochemistry and agriculture. The work, in its most complete incarnation (after the fences are removed and the toxic-laden weeds harvested) will offer minimal visual and formal effects. For a time, an intended invisible aesthetic**
will exist that can be measured scientifically by the quality of a revitalized earth. Eventually that aesthetic will be revealed in the return of growth to the soil.

Again ask if the students consider this art or not and why?

“Does art need to be in a gallery?”

(2 minutes) Students will be asked to get into groups of 2 or 3 and write a list of 4-5 effects of the population on the environment.

Ask them to chose one and design a reclamation project for it.

(2-3 min) Writing a sentence or two, have students groups compose a commentary for their project.

Remind them that and that they should refer to the components listed for reclamation art.

Ask students to start making sketches of the project.(let them know they will only have about 5 minutes or so for this and since these are initial sketches they shouldn’t be too detailed)

(3-5 min) Go around the room and ask students to hold up sketches and give a brief description along with the written commentary.
Instructional Strategies: Teacher will write on the board and list out loud:

Components of Reclamation Art…
- Artist makes a commentary on an environment
- Artist manipulates the landscape
- Art serves to transform the effects from peoples on an environment

Students will be called on in class to verbally identify how local environments have been impacted by development or other industrialization.

Teacher will create list of impacts on the board.

Students will be asked to group into 2 or 3 and decide which listed item they would like to do further research on.

Students will be told that they will be designing a proposal for a reclamation project and they will need to gather information about their subject from various media sources. (most likely they will find most of it on the internet. Make sure they give all source information as well)

Remind students that this project should be designed for a local area (within 30 miles)

Students groups should write a paragraph describing the intention and placement of the proposed project.

Ask Students to use drawings, paintings or computer aided design to demonstrate their project as part of a proposal for actual execution.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Needs Improvement</th>
<th>Satisfactory (1 point)</th>
<th>Excellent (2 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The unit includes all 4 content areas</td>
<td>some areas missing</td>
<td>all present but some less developed</td>
<td>All present and developed with relevant knowledge and skills, see concepts and principles in ch4</td>
</tr>
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<tr>
<td><strong>Unit is aligned with itself</strong></td>
<td>Lessons do not address or are insufficient to teach unit goals</td>
<td>Lessons address/achieve some unit goals</td>
<td>Lessons include sufficient knowledge and skills for students to achieve goals</td>
</tr>
<tr>
<td><strong>Sequence is logical</strong></td>
<td>Illogical, lacking meaningful transitions/connections</td>
<td>Logical sequence but lessons seem somewhat disconnected</td>
<td>Thoroughly connected, sequenced and logical progression through learning</td>
</tr>
<tr>
<td><strong>EI key concepts and EQ provide focus and cohesiveness</strong></td>
<td>Lessons lose focus</td>
<td>Some lessons focused</td>
<td>All lessons thoroughly focused on EI, EQ and/or Key Concepts</td>
</tr>
<tr>
<td><strong>Key art understandings are surfaced in the unit p. 66</strong></td>
<td>Key understandings absent</td>
<td>Implied</td>
<td>Directly observable</td>
</tr>
<tr>
<td><strong>Topic developed at personal, historical, social levels</strong></td>
<td>Unit mostly rooted in one area (the personal?)</td>
<td>Some treatment of each</td>
<td>Thoughtful development of each level</td>
</tr>
<tr>
<td><strong>Activities and questions for students are substantive and engaging</strong></td>
<td>Questions or activities are closed ended</td>
<td>Some questions or activities seem may result in superficial student engagement</td>
<td>Questions and activities seem to provide for sustained engagement, open-ended problem solving</td>
</tr>
<tr>
<td><strong>Personal/real life connections are provided</strong></td>
<td>Unit contains few connections to student’s lives</td>
<td>Unit contains some connections to student’s lives or authentic situations</td>
<td>Unit is full of activities connected to authentic life situations/knowledge</td>
</tr>
<tr>
<td><strong>Unit evidences constructivism</strong></td>
<td>Learning/ information is presented to students</td>
<td>Learning is sometimes active, sometimes passive</td>
<td>Learning/ information is actively built by students</td>
</tr>
<tr>
<td><strong>Instructional</strong></td>
<td>Little variety, same</td>
<td>Somewhat varied</td>
<td>Varied and diverse</td>
</tr>
<tr>
<td>Instructional strategies are varied and interesting</td>
<td>Little variety, same strategies repeated over and over</td>
<td>Somewhat varied</td>
<td>Varied and diverse selection of instructional strategies evident</td>
</tr>
<tr>
<td>Assessment</td>
<td>Not made clear, criteria and levels fuzzy or absent</td>
<td>Provided in advance, criteria and levels of achievement clear</td>
<td></td>
</tr>
<tr>
<td>Assessment task authentic</td>
<td>Assesses items not stressed in EQ and objectives</td>
<td>Directly linked to EQ and objectives</td>
<td></td>
</tr>
<tr>
<td>Uses only 1 type of assessment</td>
<td></td>
<td>Uses summative and formative</td>
<td></td>
</tr>
<tr>
<td>Connections to</td>
<td>Task is not “real world”</td>
<td>Task is related to real world</td>
<td></td>
</tr>
<tr>
<td>Briefly mentioned</td>
<td>Somewhat</td>
<td>Substantive</td>
<td></td>
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