



Curriculum Overview

Environmental Science and Outdoor Pursuits

Course Description

This course is a combination of both Environmental Science and Outdoor Pursuits. Students will learn about various topics regarding the environment we live in while also participating in various physical activities throughout the course year. Students will explore a variety of past-times, hobbies and sports (which are not traditional team games). The activities we partake in can be done alone or with a group and encourage you to value the variety of outdoor adventures that can be done right in your own backyard! Outdoor Pursuits provides the opportunity to address growing public concern for the conservation and sustainability of our precious natural resources, while at the same time providing students the opportunity to experience outdoor recreational activities. Programming which provides a challenge to an individual to discover new personal limits, will be explored while providing an opportunity to develop an ecological awareness of our natural environment. Students will become directly involved in the planning and organization of activities which will allow them to take on roles of responsibility directly within the learning environment. Students will gain a greater appreciation for the natural environment and its potential to enhance an active living lifestyle.

Enduring Understandings

Environmental Science:

Students will understand...

- Students will understand that resource availability has guided the development of human society.
- Water is the most important resource on our planet.
- Compare and contrast how we have used water historically and presently for our needs and how those uses have changed the natural water system (ex: deforestation, dams and erosion, fertilization, etc .
- Sustaining the world population requires changes in how we use, treat, and dispose of our fresh water
- Students will understand that human actions directly affect natural systems on the earth, both positively and negatively.
- Energy is conserved on our planet and is neither lost nor destroyed but rather converted from one form to another.
- Organisms interact with one another and with Earth's systems.
- Students will understand that pollution impacts all environmental components as well as human health.
- All organisms depend on land to survive.
- Human impact due to farming and resource collection has short-term as well as permanent impacts on the land.

Outdoor Pursuits:

Students will understand...

- Our overall wellness consists of a balance between physical wellness, intellectual wellness, social wellness, environmental wellness, and emotional wellness.
- Regular participation in recreational outdoor activities can help to promote a healthy body and a healthy

mind.

- While participating in outdoor recreational activities, it is important to know basic first aid and what to do in an emergency situation.
- Physical Fitness is a process, not a product. Wellness is a process, not a product.
- There are many different past-times, hobbies and sports that promote a healthy and active lifestyle which are not traditional team games.
- Communicating and working well with others are important skills that help to promote successful participation in a variety of activities.

Essential Questions

Environmental Science:

- What environmental issues surround us here in SE WI and what should we do about them?
- What are the world views on environmental issues and how has that changed how certain societies have developed?
- What are the historical uses of water and how do those uses contribute to how we use water today? How has our change in land use affected that?
- What are the current laws surrounding water use and how have those changed over the years?
- What are current and future environmental problems we will face with our fresh water?
- Do humans use available resources in the best possible manner?
- Are there better ways to dispose of our waste than our current methods?
- What are humans doing to improve environmental conditions to maintain or improve our planet's ecosystems?
- What sources do we use to obtain our energy?
- What are the non-renewable sources and what are the sustainable energy sources and how do each of these affect the environment?
- What is the relationship between environmental health and human health?
- How can we best balance our own interests and needs with the health of our air?
- How do our choices as consumers and waste producers affect our environment, specifically with climate change?
- How can we balance human needs for food with the needs of the environment?
- How can we use Earth's resources for sustainable farming practices?

Outdoor Pursuits:

- Why should I participate in outdoor activities?
- What are the past times, hobbies and sports that we have available to us in SE Wisconsin?
- What are the physical benefits of participating in outdoor activities?
- What is wellness?
- What does it mean to be fit?
- What are the keys to basic first aid?
- What do I do in various emergency situations while outdoors?
- What are strategies to prevent an emergency situation?
- Why is teamwork important?
- How can I develop my leadership and communication skills?

THE FOLLOWING ARE RELEVANT TO EACH ACTIVITY INTRODUCED DURING THIS COURSE:

- Where can I participate in this activity?
- How do I prepare to participate in this activity?
- How will I master the necessary technical skills relevant to this activity?
- What is the proper etiquette necessary to participate in this activity?

Units of Study

Environmental Science:

- Introduction to Enviro Science
- Water
- Ecology/Invasive species
- Energy- Non-renewable and sustainable
- Air
- Climate change
- Populations
- Farming and land use

Outdoor Pursuits:

- Teamwork & Cooperative Activities
- Road and Trail Biking
- Hiking
- Rock Climbing/Archery
- Compass and Orienteering
- Snowshoeing
- Cross Country Skiing
- Quinzee Survival Shelters
- Kayak and SUPs

Primary Resources

Environmental Science:

- The National Environmental Education Foundation
- BSCS Science Learning
- Project Learning Tree
- Project Wild
- Project Wet
- KEEP

Outdoor Pursuits:

- Shapeamerica.org
- Pecentral.org
- Peuniverse.org
- Movement Matters by Michael Beringer
- PhysEdgames.org
- GopherPEblog.org
- Polargofit.com
- Thepespecialist.com
- Youtube.com
- Tedtv.com
- Activities that Teach, Tom Jackson
- More Activities That Teach, Tom Jackson
- Project Adventure
- <https://www.rei.com/learn/expert-advice/>
- Cdc.gov