

YMCA Camp Seymour OEE Curriculum Alignment with Washington EALRs for Grade 6

In addition, all Environmental Education classes meet Environmental and Sustainability Education Standards 1 and 2

Boating	Students learn the basic skills of canoeing and water safety. They learn how to put on a lifejacket, how to board and steer a canoe, and the parts of a boat. During class, it's not uncommon to hear students squeal with excitement when seeing sea stars and crabs right over the sides of their canoes!
Health and Fitness	Activity Meeting Component
1.2	Students learn the safety rules of boating, including boating with a buddy, how to maneuver their canoe, how to properly fit a lifejacket.
Vocabulary	paddle, blade, grip, shaft, bow, stern, keel, PFD
Climbing Wall	The class is limited to 14 campers and there must be an adult chaperone with each learning group. Students have the incredible opportunity to climb our 38-foot wall. Students are given a safety orientation, roped into a climbing harness, and "belayed" by a trained Camp Seymour staff member. It is a great way for students to build their self-esteem, as well as boosting each other as they encourage their friends!
Health and Fitness	Activity Meeting Component
1.2	Students learn how the Climbing Wall's safety equipment works and how to properly wear seat harnesses and helmets. Students demonstrate proper climbing techniques.
Communication	Activity Meeting Component
2.1.1	Students encourage classmates to reach their goals through positive, verbal reinforcement in a volume that still allows the climber to communicate with their belayer.
2.2.1	Students respect each individual climber's strengths, limitations, and goals on the wall and encourage the climber appropriately.
Vocabulary	safety, harness, belay, goal, challenge
Co-op Course	Students love this team-building adventure course! Students start out with challenges on our ball field and progress to more difficult elements on our course. Try swinging on a vine across a flooded valley or making a bridge across a lava field! All activities are designed to facilitate cooperation, communication, and leadership skills.
Communication	Activity Meeting Component
1.1.1	Students adapt their listening skills to successfully complete challenges as a group. Without communication and active listening, the group will not be successful in activities.
1.1.2	Students reinforce that they are listening to group members by creating solutions based on their suggestions.
1.2.1	Students are faced with challenges that include no speaking requiring them to use nonverbal communication.
2.1.1, 2.2.1, 2.2.2	Students use language that encourages group success in a variety of challenges including engaging all members of the group, using a variety of strategies and reinforcing successful ideas.

Vocabulary	teamwork, leader, verbal, nonverbal, communication, safety, positive, attitude
Discovery Hike	Students experience the magic of the forest through an entirely sensory experience. Discover a whole new way to look, listen, touch, and smell. This class is designed to heighten students' awareness of the natural environment while taking them on a hike through our 'outback'. Camp's naturalists, teachers or parents can lead this hike into the outback trails.
Communication	Activity Meeting Component
1.1.1	Students individually focus on different senses to explore the forest as a whole.
Ornithology	Get out binoculars and bird field guides! Students watch for gulls, ducks, great blue herons, and bald eagles from the Environmental Center balcony. Learn what makes birds such an amazing species through a variety of hands-on activities.
Science	Activity Meeting Component
LS1E	Students identify characteristics that are unique to birds. They also differentiate between different types of feathers, beaks, and feet.
LS2B	Students discuss where birds fit in a food web.
LS3E	Students identify characteristics that help birds survive better in their environment, including behaviors such as hiding nests and adaptations such as beaks and feet that allow them to find food in their ecosystems. Activity: Feeding Frenzy, Jays and Wrens
EALR Vocabulary	adaptation, air, characteristic, consumer, describe, ecosystem, energy, evolution, food web, function, habitat, investigation, observe, species, system
Forest Ecology	Explore the forest by taking part in a nature walk; not only to identify various plant, animal, and fungi species commonly found at Camp Seymour, but also to learn about their niche in the forest ecosystem. Food webs, diversity, photosynthesis, life cycles, and identification will be covered.
Science	Activity Meeting Component
SYSA	Students discuss the different components with in a forest and identify and characterize plants and animals that are essential to this ecosystem.
INQB, LS1E	Students learn tree identification and a systematic way of categorizing trees through a field study in Camp Seymour's outback. Activity: Dichotomous Keys
LS1C	Students will learn all the internal and external parts of a tree, and how they work together. Activity: Build a Tree
LS2A	Students will learn the difference between living and nonliving parts of an ecosystem.
LS2B	Students create food webs and learn the connections between the living and non-living parts of the forest ecosystem.
LS2C	Students learn to how to create a food web with producers, consumers and decomposers. Activity: Food Web Knot; PIT
LS2D	Students learn how plants and animals within the forest change over time in a process called forest succession. Activity: Forest Evolution(rock/paper/scissors game)
LS3E	Students learn that animals and plants adapt to their surroundings and change based on the resources available to them.

EALR Vocabulary	adaptation, air, characteristic, consumer, decomposer, ecosystem, energy, environment, evidence, food web, function, habitat, nutrients, observe, organism, photosynthesis, producer, relationship, species, system
Marine Science I	Students are introduced to the basics of marine biology on Puget Sound. The focus of this class is on tides, estuaries, and marine life, including a hands-on encounter with sea stars, moon snails, crabs, anemones, and many more of the marine creatures in touch tanks in the Powell Marine Science Center.
Science	Activity Meeting Component
ES1	During the discussions of the tides, students review how the earth, moon, and sun are interconnected.
ES1D	Students understand how the rotation of the earth, the revolution and gravity of the moon, and the sun's position cause and change the tides.
LS1C	Students identify a variety of life functioning parts of creatures, including barnacle cirri, moon snail radula, echinoderm tube feet, crab pinchers, and anemone stinging cells.
LS1E	Students identify and classify marine invertebrates into phyla based on external characteristics.
LS2A	Students discuss how estuaries have components of both oceans and rivers. They discuss what a unique ecosystem an estuary is for both plants, animals, and people. Activity: Estuary Shuffle
LS2C	Students learn that plankton and algae produce most of the earth's oxygen through photosynthesis.
EALR Vocabulary	adaptation, air, characteristic, consumer, ecosystem, environment, evidence, evolution, factor, food web, function, gravity, habitat, investigation, moon, orbit, observe, organisms, photosynthesis, population, producer, relationship, species, system, wind
Marine Science II	One marine class is just not enough! Marine 2 broadens students' knowledge of marine biology, taking a closer look at marine invertebrates, and discovering some of their unique adaptations. Information from the Marine 1 class may be further explored. Tides permitting, students may find themselves exploring on the beach or doing 'BELLY BIOLOGY' off the dock.
Science	Activity Meeting Component
INQB	Students explore the beach and learn more about the animals by asking questions from their experiences. Activity: Beach walk
ES1A	During the discussions of the tides, students explain the rotations of the Moon around the Earth.
ES1D	Students understand how the gravity of the Moon and the Sun cause and change the Earth's tides.
LS1E	Students design and answer questions about an imaginary marine animal, and classify it within a discussed phylum. Activity: Create-A-Critter
LS3E	Students examine tidal zones and discuss why animals with certain adaptations survive better in certain zones. Activity: Belly Biology
EALR Vocabulary	adaptation, air, characteristic, consumer, ecosystem, environment, evidence, evolution, factor, food web, function, gravity, habitat, investigation, moon, orbit, observe, organisms, photosynthesis, population, producer, relationship, species, system, wind

Nature Drawing and Poetry	This class allows students to have time to appreciate nature in their own ways. After hiking through the woods, students have the opportunity to express their feelings about nature through drawing, writing poetry, or painting. Students discuss types of poetry and share their thoughts and ideas. This class is a great way for campers to have a little down time to reflect during a fun-filled and active camp experience.
Writing	Activity Meeting Component
2.3.1	Students use different methods of writing to communicate their observations and feelings in nature.
3.1.2	Students create poetry using different structures and forms to record memories of camp.
3.2.2	Students are encouraged to write in metaphors, similes and sound-like words to create an effective piece of writing.
3.2.3	Students write their own nature poems after listening to a rhythmed poem.
Communication	Activity Meeting Component
3.3.1	Students share their poems or art with the rest of the learning group.
EALR Vocabulary	describe, metaphor, observe, poem, simile, vivid verb
Orienteering	Instruction takes place on the compass course in the outback. Students use math skills to learn how to use a compass and practice taking bearings and pacing. Students gain self-confidence as they become familiar with the use of a compass in this popular class.
Science	Activity Meeting Component
APPA	Students discuss what advances in technology has developed since the compass.
APPH	Students learn that the compass was invented by the Chinese more than 3,000 years ago.
ES1C	Students identify other means of finding direction, such as the predictable motion of the sun, moon, and stars.
EALR Vocabulary	Moon, orbit, predict, technology

Reptiles	Designed to teach students basic concepts and general knowledge about reptiles. Teaching and discussing the facts can dispel many myths, misconceptions and irrational fears surrounding these animals. This class will identify reptile characteristics and explain their needs, habitats and habits. Students will have the opportunity to touch some of these animals and to observe them all.
Science	Activity Meeting Component
LS1E	Students will classify animals as reptiles based on their characteristics. Activity: Build A Snake
LS2B	Students determine where reptiles belong in a food web.
LS2D	Students discuss how humans have influenced the population of many reptile species.
LS3E	Students discuss how snakes use their scales for a variety of things, including light sensory, movement, moisture regulation, protection, camouflage, and biomimicry. They also discuss how a snake's jaw allows it to eat, and its specialized rib cage allows it to swallow.
LS3G	Students find evidence of vestigial legs in boas and pythons.
Communication	Activity Meeting Component
1.2.2	Students discuss how the media influences people's feelings about reptiles.
2.3.2	Students discuss how cultural views and the beliefs of influential adults in children's lives can impact children's feelings about reptiles.
EALR Vocabulary	adaptation, characteristic, consumer, ecosystem, energy, environment, evolution, food web, functions, habitat, observe, organism, population, species, system
Salmon	Salmon are a vital part of the Pacific Northwest culture and environment. Find out how much you know about these famous fish. Visit one of Washington's largest natural salmon runs – Lackey Creek. Are there signs of salmon habitation? Is this a healthy stream? What can you and your family do to help conserve salmon habitat? In this class we will discuss many questions and thoughts about salmon and our environment.
Science	Activity Meeting Component
LS2D	Students discuss how human influence effects salmon reproduction. Human influence takes many forms including fishing, pollution, and construction around riparian zones.
LS2B	Students understand where salmon fit in a food web. Activity: Bear, Salmon, Mosquito
LS3E	Students learn the adaptations that allow salmon to travel from the stream to the ocean and back again.
EALR Vocabulary	adaptation, characteristic, consumer, describe, ecosystem, energy, environment, factor, food web, habitat, investigation, nutrients, observe, organism, population, predict, relationship, species, system

Sasquatch	Sasquatch... myth or reality? In this class students learn about the controversy surrounding Sasquatch in the Pacific Northwest ecosystems. There have been recent sightings of Sasquatch in the 150 acres of Camp Seymour. Students armed with scientific inquiry will go out into the woods in search of Sasquatch. They will discover how Sasquatch could survive in this ecosystem: what plants could Sasquatch eat? where would Sasquatch take shelter? would Sasquatch use tools to survive? Lastly, will the students see a Sasquatch today?
Science	Activity Meeting Component
INQA	Students learn to formulate a scientific question to investigate about Sasquatch at Camp Seymour.
INQB	Students go on an exploratory hike to investigate the possibility of Sasquatch, by observing possible food, water, shelter and space.
INQF	Students determine whether Sasquatch could survive around Camp Seymour based on what they find during the hike.
LS1E	Students identify characteristics of Sasquatch as a mammal and a two-legged animal.
LS2A	Students determine what type of ecosystem Sasquatch would prefer to live in.
EALR Vocabulary	adaptation, characteristic, consumer, ecosystem, environment, evidence, food web, habitat, investigation, observe, predict, question
Squid Dissection	Cephalopod! Students explore what makes squid such unique creatures as they get their hands dirty in squid juice. They learn characteristics of Mollusk and Squid, as well as gain an enjoyable introduction to why dissection is important and fascinating. Not "Eww gross" but "Mmmm how interesting!"
Science	Activity Meeting Component
SYSA	Students learn how a squid functions as a whole system, by dissecting it into smaller subsystems (organs).
INQA	Students ask a question about squid and determine the answer during the dissection.
LS1C	Students discuss the different functions each organ performs in a squid.
LS1E	Students classify squids and other animals as Mollusks, and more specifically as Cephalopods.
LS3E	Students discover the adaptations of a squid, such as countershading and movement.
LS3G	Students determine why squid are considered mollusks. They have a visible, fleshy foot-head but when they look inside they find the remnants of a shell in the squid's pen.
EALR Vocabulary	adaptation, characteristic, consumer, describe, ecosystem, food web, function, habitat, investigation, observe, organism, predict, question, species, system

<p>Sustainability and the Living Machine</p>	<p>Camp Seymour installed Washington's largest Living Machine in 2003. What's a Living Machine? It's a sewage treatment facility that will treat effluent to a level that will allow its reuse in irrigation of the play field and in flushing toilets throughout the camp. The most visible part of the treatment facility is a greenhouse, where plants and other living organisms – housed in six aerobic hydroponic tanks – treat camp's waste-water. The final processing is done in a wetland just outside the greenhouse. <u>Essentially the Living Machine is its own ecosystem, accelerating nature's own water purification process!</u></p> <p>This visible demonstration of functional and sustainable systems will provide a living classroom of alternative ways to process waste and reuse resources. The environmental education program will incorporate concepts of sustainability into its curriculum. As a result the more than 8,000 school children, parents and teachers who visit the camp annually will have the opportunity to learn first-hand how sustainable systems can work cooperatively with nature to produce useful end products. So come learn all about Sustainability and our Living Machine!</p>
<p>Science</p>	<p>Activity Meeting Component</p>
<p>SYSA, SYSC</p>	<p>Students learn how our Living Machine cleans water using multiple steps and systems. Activity: Living Machine Tour</p>
<p>INQB</p>	<p>Students determine which tools and process to use in a simulated water treatment experiment.</p>
<p>INQC</p>	<p>Students report the success and limitations of their process for treating the water.</p>
<p>APPA</p>	<p>Students are introduced to the living machine, a new solution to water treatment. They investigate why the living machine is a solution to the flaws in the current most widely used method.</p>
<p>ES2C</p>	<p>Students learn the stages of the water cycle. Activity: water cycle aerobics, Incredible Journey</p>
<p>LS2D</p>	<p>The living machine focuses on water as a non-renewable resource. Students discuss other resources throughout the class and determine whether they are renewable or not. They discuss what people can do to conserve and protect resources on earth. Activity: Landfill Legacy</p>
<p>Communication</p>	<p>Activity Meeting Component</p>
<p>2.2.2</p>	<p>Students brainstorm solutions to completing the task of simulating water treatment process. Within their group, they create and apply their solution.</p>
<p>EALR Vocabulary</p>	<p>decompose, describe, energy, evaporate, function, investigation, nutrients, observe, organism, photosynthesis, population, predict, relationship, sustainability, system, technology, wind</p>
<p>Tree-ific</p>	<p>The towering forests of Camp Seymour are an ideal laboratory for learning about trees. Students are trained to be 'tree detectives' as they investigate the mysteries of tree biology and identification. Naturalists use creative activities to teach students how trees function as part of a forest ecosystem.</p>
<p>Science</p>	<p>Activity Meeting Component</p>
<p>SYSA</p>	<p>Students "build a tree" becoming xylem, phloem, cambium, and heartwood to learn how a tree functions as a whole system. Activity: Build a Tree</p>
<p>LS1C</p>	<p>Students review the internal structures of trees and their functions for life.</p>
<p>LS1E</p>	<p>Students identify different tree species around Camp Seymour. Activity: Dichotomous Keys</p>
<p>LS2A</p>	<p>Students discuss the different components within a forest and identify and characterize plants and animals that are essential to this ecosystem.</p>
<p>LS2B</p>	<p>Students focus on producers, the first step in the forest food chain.</p>
<p>LS2C</p>	<p>Students explain how trees use photosynthesis to turn the Sun's energy into food.</p>

LS3E	Students identify adaptations trees use to survive in a temperate rain forest.
EALR Vocabulary	adaptation, air, characteristic, ecosystem, energy, environment, evidence, factor, function, habitat, nutrients, observe, organism, photosynthesis, producer, relationship, species, system
Underworld	What lurks on the forest floor? Students examine what lies on the forest floor and how nature recycles its resources. Concepts of community, soil, and habitat are discovered through exploration, insect discovery, and the use of field microscopes.
Science	Activity Meeting Component
ES3E	Students discover how decomposers are essential to soil formation. Activity: Ingredients of Soil Cards
LS1E	Students identify decomposers based on their behaviors and characteristics. Activity: Brock Scopes
LS2A	Students describe the living and nonliving parts of the forest floor ecosystem.
LS2B	Students learn that decomposers gain usable energy from other organisms' waste, which is then recycled into soil energy for producers.
EALR Vocabulary	adaptation, air, characteristic, consumer, decomposer, describe, ecosystem, energy, environment, evidence, food web, function, habitat, investigation, nutrients, observe, organism, predict, question, system
Wildlife Ecology	Take a walk on the wild side of the food web! Students experience life as predator and prey through activities and role-playing games, learning that in nature, everything is connected. Look at skulls and bones of native wildlife and find out why the mountain goat has eyes on the side of its head, but the cougar has its eyes on the front!
Science	Activity Meeting Component
LS1E, LS3E	Students examine skulls of animals to determine traits and adaptations of predators and prey. Activity: Skull Observation
LS2A	Students identify the living and nonliving parts of ecosystems.
LS2B	Students explore the connections between herbivores, omnivores, and carnivores.
LS2D	Students predict what will happen to a population of animals if changes in their habitat occur. Activity: Oh, Deer!
EALR Vocabulary	adaptation, characteristic, consumer, describe, ecosystem, energy, environment, evidence, evolution, factor, food web, function, habitat, investigation, observe, organism, population, predict, question, relationship, species, system
Wild Worms	Worms are part of the natural process of decomposition within an ecosystem. Humans have found a way to use that process to their advantage. Vermicomposting is the process of using worms to convert food waste into nutrient rich soil. This class will discuss this process, experience Camp's vermicomposting system, which houses about 100 pounds of worms, and have a hands-on experience with live worms where students measure, observe and use critical thinking skills to answer questions about worms.
Science	Activity Meeting Component
INQB	Students collect data about worms through personal study and observation
APPA	Students visit our worm-composting bin where food from their plates is recycled. During spring and fall, students can view plants growing in our garden where the compost is used.

ES3E	Students learn how worms are essential to soil creation.
LS1C	Students describe the functions of a worm's digestive and respiratory tracks. Activity: Build a Worm
LS2B	Students determine how worms and other decomposers fit into a food chain. They discuss what would happen to the energy in dead matter without decomposers.
EALR Vocabulary	adaptation, characteristic, consumer, decomposer, describe, ecosystem, environment, food web, function, habitat, investigation, nutrients, observe, organism, question, relationship, system



