



Natural Resources

Course: Natural Resources		Total Framework Hours up to: 180
CIP Code: 030201	<input checked="" type="checkbox"/> Exploratory <input type="checkbox"/> Preparatory	Date Last Modified: 2012
Career Cluster: Agriculture, Food and Natural Resources		Cluster Pathway: Natural Resources

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Match potential career opportunities in career clusters with personal interests, talents, goals and preferences. CRP.10.01.02.c
- Organize personal information to prepare and continuously update a set of tools to aid in the pursuit of a career path. CRP.10.04.01.b
- Apply skills to complete common processes involved in pursuing a career and assimilate input and feedback from experts to improve. CRP.10.04.02.c
- Examine and practice the skills needed to complete common processes for pursuing a career. CRP.10.04.02.b
- Analyze skills needed for potential careers and compare and contrast skills needed with personal interests, talents, goals and preferences. CRP.10.01.02.b

Leadership Alignment: Students will use and manage their information to keep up to date job documents. Students will access and evaluate information to compile a presentation on a career of interest. Students will reason effectively when looking at skills needed in the job market.

Standards and Competencies

Unit: Careers in the Natural Resource/Environmental science fields.

Competencies	Total Learning Hours for Unit: 10
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- Identify career opportunities within a career cluster that match personal interests, talents, goals and preferences.
- Examine career advancement requirements (e.g., education, certification, training, etc.) and create goals for continuous growth in a chosen career.
- Develop relationships with and assimilate input and/or advice from experts (e.g., counselors, mentors, etc.) to plan career and personal goals in a chosen career area.
- Identify, prepare, update and improve the tools and skills necessary to pursue a chosen career path.

Aligned Washington State Standards

Educational Technology	Innovate: Demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology.
Language	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
Reading	Read and comprehend complex literary and informational texts independently and proficiently.
Writing	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Evaluate the impact of laws associated with environmental service systems for their impact on wildlife, people, the environment and the economy. NRS.02.01.01.c
- Research policies, practices and initiatives common in business and advocacy groups associated with environmental service systems. ESS.02.01.03.a
- Interpret and evaluate the impact of specific environmental service regulation policies. ESS.02.02.02.c
- Analyze and summarize specific changes to perceptions and regulations of environmental service systems and their impact on reducing the ecological, economical and sociological impact. ESS.02.03.01.b

Leadership Alignment: Students will collaborate with others in classroom discussion on environmental issues. Students will access and evaluate information on environmental policies and regulations.

Standards and Competencies

Unit: Interdependence of Earth’s systems: Fundamental Principals and Concepts.

Competencies

Total Learning Hours for Unit: 25

- Environmental Issues, their causes and sustainability.
- Environmental History: An Overview
- Science, Systems, Matter, and Energy

Aligned Washington State Standards

Educational Technology	Collaborate: Use digital media and environments to communicate and work collaboratively to support individual learning and contribute to the learning of others. Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources.
Health and Fitness	Understands how family, culture, and environmental factors affect personal health.
Language	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
Reading	Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
Science	Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs. Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.
Social Studies	Understands the government’s role in the economy. Understands the physical characteristics, cultural characteristics, and location of places, regions, and spatial patterns on the Earth’s surface. Understands human interaction with the environment. Uses critical reasoning skills to analyze and evaluate positions.
Speaking and Listening	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric
Writing	Write arguments to support claims in an analysis of substantive of topics or texts, using valid reasoning and relevant and sufficient evidence. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

COMPONENTS AND ASSESSMENTS

- Performance Assessments:**
- Distinguish between the different components and structural layers of the earth's atmosphere. ESS.03.01.01.a
 - Interpret data measuring air pollution to determine its threat on human populations and ecological interactions. ESS.03.01.02.c
 - Research and describe the process of soil formation through weathering. ESS.03.02.02.a
 - Summarize environmental hazards associated with groundwater supplies. ESS.03.02.04.a
 - Conduct tests of soil to determine its potential for filtration of groundwater supplies and likelihood for flooding. ESS.03.02.03.c
 - Evaluate the methods used in a given example to protect groundwater supplies. ESS.03.02.04.c

Leadership Alignment: Students will use systems thinking to understand and apply information about soils towards growth and agriculture. Students will make judgments and decisions about pollution and the treat to living populations. Students will work effectively in diverse teams to present their research findings on water issues and dams.

Standards and Competencies

Unit: Earth Systems and Resources.

Competencies **Total Learning Hours for Unit: 20**

- Geology: Processes, Hazards and Soils; plate tectonics, erosion, weathering, rocks, minerals.
- Soil and soil Dynamics; formation, profiles, triangle, erosion, desertification, salinization.
- The Atmosphere; Biogeography: weather and climate.
- Global Water Resources and Use; fresh water, water shortages, damming and water shortages, desalinization, irrigation.

Aligned Washington State Standards

Educational Technology	Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources.
Math	Reason quantitatively and use units to solve problems Apply geometric concepts in modeling situations Use probability to evaluate outcomes of decisions
Reading	Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. Read and comprehend complex literary and informational texts independently and proficiently.
Science	Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
Social Studies	Understands the purposes, organization, and function of governments, laws, and political systems. Understands the government's role in the economy.

	<p>Understands the physical characteristics, cultural characteristics, and location of places, regions, and spatial patterns on the Earth's surface.</p> <p>Understands human interaction with the environment.</p> <p>Uses critical reasoning skills to analyze and evaluate positions.</p> <p>Understands the economic issues and problems that all societies face.</p>
Speaking and Listening	<p>Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</p> <p>Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric</p>
Writing	<p>Write arguments to support claims in an analysis of substantive of topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <p>Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.</p>

COMPONENTS AND ASSESSMENTS

- Performance Assessments:**
- Describe the microbial biodiversity found in soil and summarize the contribution of microbial biodiversity to the physical and chemical characteristics of soil. ESS.03.04.01.a
 - Calculate the amount of biodiversity in a given area using an appropriate method. ESS.03.05.01.b
 - Assess and describe the impact of a population exceeding its carrying capacity on environmental service systems. ESS.03.05.03.b
 - Evaluate the importance of habitat to environmental service systems and devise strategies to minimize the future loss of habitats. ESS.03.05.02.c
 - Analyze how biodiversity develops through evolution, natural selection and adaptation; explain the importance of biodiversity to ecosystem function and availability of natural resources.
 - Analyze the interdependence of organisms within an ecosystem (e.g., food webs, niches, impact of keystone species, etc.) and assess the dependence of organisms on nonliving components (climate, geography, energy flow, nutrient cycling, etc.).

Leadership Alignment: Students will access and evaluate information on populations. Students will collaborate with others about environmental issues related to population growth. Students will use systems thinking when presenting about sustainability and biodiversity with our world.

Standards and Competencies

Unit: The Living World

Competencies	Total Learning Hours for Unit: 20
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- Ecosystem Structure; Biomes and terrestrial ecology. Aquatic ecology, salt and fresh water life zones, eutrophication, community ecology, non-native vs native species, indicator and keystone species, symbiotic relationships.
- Energy Flow; populations, communities, food chains and webs.
- Evolution and Biodiversity; micro and macro evolution, niches, generalist and specialist.
- Natural Ecosystem Change; ecological succession.
- Natural Biochemical Cycle

Aligned Washington State Standards

Arts	Uses visual arts to communicate for a specific purpose.
Educational Technology	Collaborate: Use digital media and environments to communicate and work collaboratively to support individual learning and contribute to the learning of others.
Language	<p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>Acquire and use accurately a range of general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>

Reading	Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. Read and comprehend complex literary and informational texts independently and proficiently
Science	Apply geometric concepts in modeling situations Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.
Social Studies	Understands civic involvement. Understands human interaction with the environment. Uses critical reasoning skills to analyze and evaluate positions. Understands the economic issues and problems that all societies face. Understands the geographic context of global issues and events.
Speaking and Listening	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
Writing	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Research the purpose and value of resource inventories and population studies. NRS.01.02.06.a
- Analyze the impact that climate has on natural resources and debate how this impact has changed due to human activity. NRS.01.03.02.b
- Evaluate how modern lifestyles affect resource consumption and energy use and devise a strategy to prevent the complete loss of a natural resource. NRS.02.02.03.c
- Categorize the primary causes of extinction of living species due to human activity. NRS.02.02.02.a

Leadership Alignment: Students will use and manage information to look at solutions on population growth. Students will make judgments and decisions relating to hunting laws and human impacts on the environment.

Standards and Competencies

Unit: Populations

Competencies

Total Learning Hours for Unit: 20

- Population Biology Concepts; carrying capacity, exponential versus logistic growth; survivorship curves.
- Human Population; fertility and death rates, age structure diagrams, demographic transitions.
- Impacts of population of ecosystems and agriculture.

Aligned Washington State Standards

Educational Technology	Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources.
Language	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
Math	Reason quantitatively and use units to solve problems Apply geometric concepts in modeling situations Use probability to evaluate outcomes of decisions
Reading	Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. Read and comprehend complex literary and informational texts independently and proficiently
Science	Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity. Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.

Social Studies	Understands human interaction with the environment. Uses critical reasoning skills to analyze and evaluate positions. Understands the economic issues and problems that all societies face. Understands the geographic context of global issues and events. Understands and analyzes causal factors that have shaped major events in history.
Speaking and Listening	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
Writing	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Analyze how social considerations can affect the use and sustainability of natural resources. NRS.02.03.01.b
- Summarize and categorize the different social considerations in regards to the use of natural resources. NRS.02.03.01.a
- Anticipate and predict how future technological advancements may affect the use and views of natural resources. NRS.02.03.02.c
- Assess whether economic value increases or decreases the conservation, protection, improvement and enhancement of natural resources. NRS.02.04.01.b
- Anticipate and predict the economic impact green technology and alternative energy. NRS.02.04.03.c
- Assess harvesting methods in regards to their economic value, environmental impact, and other factors. NRS.03.01.01.b
- Develop a method for the sustainable harvest of wildlife species. NRS.03.01.02.c
- Evaluate methods used to extract and process minerals for economic, environmental and social sustainability. NRS.03.01.03.c
- Assess trends in energy production and consumption in order to predict how the impact of alternative energy will change in the future. NRS.03.01.06.c

Leadership Alignment: Students will communicate clearly and interact effectively with others when putting together a campus audit that includes water use. Students will use systems thinking when assembling presentations on alternative types of farming.

Standards and Competencies

Unit: Land and Water Use

Competencies

Total Learning Hours for Unit: 25

- Agriculture; food production and nutrition, genetic engineering, irrigation, meat production, fish harvesting.
- Agriculture; pesticides and pest control; types, use, regulations, IPM
- Forestry; sustainability, land use, biodiversity.
- Rangelands; terrestrial biodiversity, land use, national parks, ecological restoration.
- Urbanization, Transportation

Aligned Washington State Standards

Educational Technology	Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources.
Language	Acquire and use accurately a range of general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
Math	Use probability to evaluate outcomes of decisions.

Reading	Read and comprehend complex literary and informational texts independently and proficiently. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
Science	Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
Social Studies	Understands human interaction with the environment. Uses critical reasoning skills to analyze and evaluate positions. Understands the economic issues and problems that all societies face. Understands the geographic context of global issues and events. Understands the purposes, organization, and function of governments, laws, and political systems. Understands the government's role in the economy. Understands the physical characteristics, cultural characteristics, and location of places, regions, and spatial patterns on the Earth's surface.
Speaking and Listening	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
Writing	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Compare and contrast the costs and benefits (e.g., environmental impacts, etc.) of alternative sources of energy (e.g., hydroelectric, solar, wind, biofuels, geothermal, etc.). NRS.03.01.06.a
- Evaluate methods used to extract and process shale oil for economic, environmental and social sustainability. NRS.03.01.05.c
- Compare and contrast the costs and benefits (e.g., impacts on environment, economic, wildlife, etc.) of fossil fuels to a local, state and/or national economy. NRS.03.01.04.a

Leadership Alignment: Students will communicate clearly and interact effectively with others when putting together a campus audit that includes energy use. Students will collaborate with others when comparing alternative energy sources and their costs. Students will communicate clearly in a debate about our economies dependence on fossil fuels.

Standards and Competencies

Unit: Energy Resources and Consumption

Competencies

Total Learning Hours for Unit: 15

- Energy Concepts and Consumption
- Fossil Fuel Resources and Use; removing minerals, coal, natural gas.
- Nuclear Energy
- Renewable Energy; efficiency and sustainability.

Aligned Washington State Standards

Educational Technology	Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources.
Language	Acquire and use accurately a range of general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
Math	Reason quantitatively and use units to solve problems.

Reading	Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
Science	Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.
Social Studies	Understands the government's role in the economy. Understands the physical characteristics, cultural characteristics, and location of places, regions, and spatial patterns on the Earth's surface. Understands human interaction with the environment. Uses critical reasoning skills to analyze and evaluate positions.
Speaking and Listening	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric
Writing	Write arguments to support claims in an analysis of substantive of topics or texts, using valid reasoning and relevant and sufficient evidence. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Calibrate and use environmental monitoring instruments according to standard operating procedures.
- Research and categorize the purpose, implementation and impact of greenhouse gas emission policies (e.g., emission offsetting, zero-emissions, carbon-neutrality, carbon sequestration, etc.).
- Examine and summarize how chemistry affects water quality and function (e.g., oxygen saturation, pH, biomagnification, etc.).
- Utilize evidence from bioindicator species to detect pollutants in a given area.
- Identify and distinguish types of pollution and distinguish between point source and nonpoint source pollution. ESS.04.01.01.a
- Research ways in which pollution can be managed and prevented and propose solutions to meet the needs of local systems. ESS.04.01.02.a
- Classify examples of pollution as hazardous or nonhazardous. ESS.04.01.03.b
- Analyze environmental hazards created by different types of solid waste, solid waste accumulation and solid waste disposal. ESS.04.02.01.b
- Analyze and document different recycling methods and classify materials that can be recycled. ESS.04.02.04.b

Leadership Alignment: Students will be solving problems by looking at alternative methods of extracting fossil fuels. Students will be accessing and evaluating information on waste disposal methods and debating in class. Students will also be working with South Sound Green on water testing/monitoring on the Deschutes River.

Standards and Competencies

Unit: Pollution

Competencies

Total Learning Hours for Unit: 15

- Air; outdoor, photochemical, acid deposition, indoor.
- Noise
- Water; point and non-point sources, oxygen sag curves, groundwater, and ocean.
- How pollution is measured.
- Wastewater treatment.
- Solid and hazardous waste.
- Impacts on human health; toxicity and risk.

Aligned Washington State Standards	
Educational Technology	Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources. Collaborate: Use digital media and environments to communicate and work collaboratively to support individual learning and contribute to the learning of others.
Health and Fitness	Acquires skills to live safely and reduce health risks.
Reading	Analyze how and why individuals, events, and ideas develop and interact over the course of a text. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.
Science	Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.
Social Studies	Understands the purposes, organization, and function of governments, laws, and political systems. Understands the purposes and organization of international relationships and U.S. foreign policy. Understands civic involvement. Understands how economic systems function. Understands the government's role in the economy. Understands the economic issues and problems that all societies face. Understands human interaction with the environment. Understands the geographic context of global issues and events.
Speaking and Listening	Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
Writing	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

COMPONENTS AND ASSESSMENTS	
Performance Assessments:	
<ul style="list-style-type: none"> Assess different measurements of assessing ecological health (e.g., quadrat biodiversity assessments, transect surveys, population counts, detection of disease and invasive species, etc.) to determine their effectiveness and limitations. ESS.05.02.04.b Research the purpose and value of resource inventories and population studies. NRS.01.02.06.a Analyze the impact that climate has on natural resources and debate how this impact has changed due to human activity. NRS.01.03.02.b Compare and contrast the impact of habitat disturbances and habitat resilience. NRS.01.05.02.a 	
Leadership Alignment: Students will use systems thinking when approaching the topic of global warming. Students will access and evaluate information and reason effectively with their data. This topic can be used in prepared public speaking or agriculture issues.	
Standards and Competencies	
Unit: Global Change	
Competencies	Total Learning Hours for Unit: 20
<ul style="list-style-type: none"> Stratospheric Ozone; ozone loss. Global Warming; climate change. Loss of biodiversity; endangered species. 	
Aligned Washington State Standards	
Educational Technology	Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources. Collaborate: Use digital media and environments to communicate and work collaboratively to support individual learning and contribute to the learning of others.
Language	Acquire and use accurately a range of general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to

	comprehension or expression.
Reading	Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
Science	Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity. Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.
Social Studies	Understands the purposes, organization, and function of governments, laws, and political systems. Understands the purposes and organization of international relationships and U.S. foreign policy. Understands the government's role in the economy. Understands the economic issues and problems that all societies face. Understands human interaction with the environment.
Speaking and Listening	Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
Writing	Write arguments to support claims in an analysis of substantive of topics or texts, using valid reasoning and relevant and sufficient evidence. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

COMPONENTS AND ASSESSMENTS

Performance Assessments:

- Devise, implement, and evaluate strategies for personal involvement in civic service at work and in the community. CRP.01.03.01.c
- Identify opportunities to apply technical concepts to solve problems in the community. CRP.02.02.01.a
- Classify the types of information (e.g., data, research, procedures, regulations, etc.) and resources (e.g., human, financial, technology, time, etc.) that may be used to make workplace and community decisions. CRP.05.01.03.a
- Analyze how different research methods are used to generate data in a variety of situations. CRP.07.01.01.b
- Analyze and demonstrate adherence to protective equipment requirements when using various AFNR tools and equipment. CS.03.04.02.b

Leadership Alignment: Students will work independently and manage their SAE projects. Students will use and manage information to share with the class about their projects. Students will participate in the local community garden project.

Standards and Competencies

Unit: Demonstrate an understanding of Supervised Agricultural Experience Programs and leadership skills.

Competencies

Total Learning Hours for Unit: 10

- Describe the various types of Supervised Agricultural Experience Programs including Experience Programs including Entrepreneurship, Placement, Improvement, and Exploratory Programs.
- Describe the purpose of Supervised Agricultural Experience Programs within the Agricultural Education program.
- Demonstrate effective communication skills.
- Incorporate appropriate research into Supervised Agricultural Experience Program.
- Participate in team work activities.

Aligned Washington State Standards

Educational Technology

Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources.

Language

Acquire and use accurately a range of general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to

	comprehension or expression.
Math	Reason quantitatively and use units to solve problems. Reason quantitatively and use units to solve problems Apply geometric concepts in modeling situations.
Speaking and Listening	Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
Writing	Write arguments to support claims in an analysis of substantive of topics or texts, using valid reasoning and relevant and sufficient evidence. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

21st Century Skills

Check those that students will demonstrate in this course:

<p>LEARNING & INNOVATION</p> <p>Creativity and Innovation <input checked="" type="checkbox"/> Think Creatively <input checked="" type="checkbox"/> Work Creatively with Others <input checked="" type="checkbox"/> Implement Innovations</p> <p>Critical Thinking and Problem Solving <input checked="" type="checkbox"/> Reason Effectively <input checked="" type="checkbox"/> Use Systems Thinking <input checked="" type="checkbox"/> Make Judgments and Decisions <input checked="" type="checkbox"/> Solve Problems</p> <p>Communication and Collaboration <input checked="" type="checkbox"/> Communicate Clearly <input checked="" type="checkbox"/> Collaborate with Others</p>	<p>INFORMATION, MEDIA & TECHNOLOGY SKILLS</p> <p>Information Literacy <input checked="" type="checkbox"/> Access and /evaluate Information <input checked="" type="checkbox"/> Use and Manage Information</p> <p>Media Literacy <input checked="" type="checkbox"/> Analyze Media <input type="checkbox"/> Create Media Products</p> <p>Information, Communications and Technology (ICT Literacy) <input checked="" type="checkbox"/> Apply Technology Effectively</p>	<p>LIFE & CAREER SKILLS</p> <p>Flexibility and Adaptability <input checked="" type="checkbox"/> Adapt to Change <input type="checkbox"/> Be Flexible</p> <p>Initiative and Self-Direction <input checked="" type="checkbox"/> Manage Goals and Time <input checked="" type="checkbox"/> Work Independently <input checked="" type="checkbox"/> Be Self-Directed Learners</p> <p>Social and Cross-Cultural <input checked="" type="checkbox"/> Interact Effectively with Others <input checked="" type="checkbox"/> Work Effectively in Diverse Teams</p> <p>Productivity and Accountability <input checked="" type="checkbox"/> Manage Projects <input checked="" type="checkbox"/> Produce Results</p> <p>Leadership and Responsibility <input type="checkbox"/> Guide and Lead Others <input checked="" type="checkbox"/> Be Responsible to Others</p>
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