



Learning that works for Washington

CTE[™]

Spokane Public Schools Horticulture Workshop

Course: Horticulture Workshop	Total Framework Hours up to: 360 Hours
CIP Code: 011103 <input checked="" type="checkbox"/> Exploratory <input type="checkbox"/> Preparatory	Date Last Modified: Thursday, January 23, 2014
Career Cluster: Agriculture, Food and Natural Resources	Cluster Pathway: Agriculture

Resources and Standard used in Framework Development:

Standards for this framework are taken from the OSPI Model Framework for Plant Systems

Unit 1 THE FLORAL INDUSTRY AND EMPLOYABILITY	Hours: 20
--	------------------

Performance Assessment(s):

Resume cover
Letter mock
Interviews

Leadership Alignment:

Job interview CDE
Floriculture CDE

Standards and Competencies

CS.02.02: Social Growth: Interact with others in a manner that respects the differences of a diverse and changing society.
 Level 1
 CS.02.02.02.a. Demonstrate proper conduct and appearances for various settings.
 CS.02.02.03.a. Identify the skills needed to develop a professional relationship. Level 2
 CS.02.02.02.b. Apply the skills required to present oneself appropriately in various settings.
 CS.02.02.03.b. Exhibit the behaviors needed for developing and maintaining a professional relationship. Level 3
 CS.02.02.02.c. Present oneself appropriately in various settings.
 CS.02.02.03.c. Maintain effective professional relationships.

CS.02.03: Professional Growth: Develop awareness and apply skills necessary for achieving career success.
 Level 1
 CS.02.03.01.a. Explore various career interests/options.
 CS.02.03.03.a. Identify the skills required for various careers. Level 2
 CS.02.03.03.b. Develop skills required for a specific career. CS.02.03.03.c.
 Demonstrate employability skills for a specific career.

CS.03.01: Communication: Demonstrate oral, written and verbal skills
 Level 1
 CS.03.01.01.a. Use basic technical and business writing skills. Level 1
 CS.03.01.02.a. Describe the various types and uses of resumes.
 Level 2
 CS.03.01.01.b. Select the appropriate form of technical and business writing or communication for a specific situation.

CS.03.01.02.b. Prepare a resume.

Level 3

CS.03.01.01.c. Demonstrate technical and business writing skills to communicate effectively with co-workers and supervisors.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

CC: College and Career Readiness Anchor Standards for Speaking and Listening

4 - 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.

6 - Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Health and Fitness
Language
Mathematics
Reading
Science
Social Studies
Writing

21st Century Skills

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

Unit 2 HISTORY OF FLOIRAL DESIGN**Hours: 20****Performance Assessment(s):**

Research of floral eras
Presentation of floral of eras to the class
Unit quiz

Leadership Alignment:

Floriculture CDE
Work effectively in group

Standards and Competencies

PS.04.01: Create designs using plants.

Level 1

PS.04.01.01.a. Define design and identify design elements.

PS.04.01.02.a. Discuss the applications of art in agriculture/horticulture.

Level 2

PS.04.01.01.b. Explain design elements of line, form, texture and color and express the visual effect each has on the viewer.

PS.04.01.02.b. Discuss principles of design that form the basis of artistic impression.

Level 3

PS.04.01.01.c Select plants, hard goods, supplies and other materials for use in a design based on a range of criteria.

PS.04.01.02.c. Create and implement designs by following established principles of art.

Aligned to Washington State Standards**Arts**

Arts 1.0 The student understands and applies arts knowledge and skills in dance, music, theatre, and visual arts.

1.1 Understands and applies arts concepts and vocabulary.

1.2 Develops arts skills and techniques.

1.3 Understands and applies arts genres and styles from various artists, cultures, and times.

Arts 4.0 The student makes connections within and across the arts to other disciplines, life, cultures and work.

4.4. Understands how the arts influence and reflect culture/civilization, place and time.

Communication - Speaking and Listening
Health and Fitness
Language
Mathematics
Reading
Science
Social Studies
Writing

21st Century Skills

<p>LEARNING AND INNOVATION</p> <p>Creativity and Innovation</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Think Creatively <input checked="" type="checkbox"/> Work Creatively with Other <input type="checkbox"/> Implement Innovations <p>Creative Thinking and Problem Solving</p> <ul style="list-style-type: none"> <input type="checkbox"/> Reason Effectively <input type="checkbox"/> Use Systems Thinking <input type="checkbox"/> Make Judgements and Decisions <input type="checkbox"/> Solve Problems <p>Communication & Collaboration</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Communicate Clearly <input checked="" type="checkbox"/> Collaborate with Others 	<p>INFORMATION, MEDIA AND TECHNOLOGY SKILLS</p> <p>Information Literacy</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Access and Evaluate Information <input checked="" type="checkbox"/> Use and Manage Information <p>Media Literacy</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Analyze Media <input checked="" type="checkbox"/> Create Media Products <p>Information, Communications, and Technology (ICT Literacy)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Apply Technology Effectively 	<p>LIFE AND CAREER SKILLS</p> <p>Flexibility and Adaptability</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adapt to Change <input type="checkbox"/> Be Flexible <p>Initiative and Self-Direction</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Mange Goals and Time <input type="checkbox"/> Work Independently <input type="checkbox"/> Be Self-Directed Learners <p>Social and Cross-Cultural</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Interact Effectively with Other <input type="checkbox"/> Work Effectively in Diverse Teams <p>Productivity and Accountability</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Manage Projects <input checked="" type="checkbox"/> Produce Results <p>Leadership and Responsibility</p> <ul style="list-style-type: none"> <input type="checkbox"/> Guide and Lead Others <input checked="" type="checkbox"/> Be Responsible to Others
---	--	--

Unit 3 SAFETY IN THE FLORAL SHOP**Hours: 4****Performance Assessment(s):**

Student will safety use the equipment and facilities during hands on activities

Leadership Alignment:

Demonstrate proper safety procedures to prevent injury

Standards and Competencies

CS.07.04: Assess workplace safety.

Level 1

CS.07.04.01.a. Research applicable regulatory and safety standards (e.g., MSDS, bioterrorism).

CS.07.04.02.a. Handle chemicals and equipment in a safe and appropriate manner.

CS.07.04.02.b. Maintain AFNR facilities to promote health and safety.

CS.07.04.01.c. Apply general workplace safety precautions/procedures.

CS.08.02: Use appropriate protective equipment and handle AFNR tools and equipment to demonstrate safe and proper use of the tools and equipment.

CS.08.02: Use appropriate protective equipment and handle AFNR tools and equipment to demonstrate safe and proper use of the tools and equipment.

Level 1

Level 1

CS.08.02.01.a. Use the appropriate procedures for the use and operation of specific tools and equipment.

CS.08.02.01.a. Use the appropriate procedures for the use and operation of specific tools and equipment.

Level 2

Level 2

CS.08.02.01.b. Demonstrate safety precautions when using tools for a specific task around bystanders.

CS.08.02.01.b. Demonstrate safety precautions when using tools for a specific task around bystanders.

CS.08.02.01.c. Operate applicable AFNR equipment and vehicles safely.

CS.08.03: Maintain tools for efficient use

Level 1

CS.08.03.01.a. Describe the conditions that cause the need for tool maintenance.

Aligned to Washington State Standards**Arts****Communication - Speaking and Listening****Health and Fitness**

Health 2.4: Acquires skills to live safely and reduce health risks.

2.4.2 Evaluates emergency situations, ways to prevent injuries, and demonstrates skills to respond appropriately and safely.

Language
Mathematics
Reading
Science
Social Studies
Writing

21st Century Skills

<p>LEARNING AND INNOVATION</p> <p>Creativity and Innovation</p> <ul style="list-style-type: none"> <input type="checkbox"/> Think Creatively <input type="checkbox"/> Work Creatively with Other <input type="checkbox"/> Implement Innovations <p>Creative Thinking and Problem Solving</p> <ul style="list-style-type: none"> <input type="checkbox"/> Reason Effectively <input type="checkbox"/> Use Systems Thinking <input checked="" type="checkbox"/> Make Judgements and Decisions <input checked="" type="checkbox"/> Solve Problems <p>Communication & Collaboration</p> <ul style="list-style-type: none"> <input type="checkbox"/> Communicate Clearly <input type="checkbox"/> Collaborate with Others 	<p>INFORMATION, MEDIA AND TECHNOLOGY SKILLS</p> <p>Information Literacy</p> <ul style="list-style-type: none"> <input type="checkbox"/> Access and Evaluate Information <input type="checkbox"/> Use and Manage Information <p>Media Literacy</p> <ul style="list-style-type: none"> <input type="checkbox"/> Analyze Media <input type="checkbox"/> Create Media Products <p>Information, Communications, and Technology (ICT Literacy)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Apply Technology Effectively 	<p>LIFE AND CAREER SKILLS</p> <p>Flexibility and Adaptability</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adapt to Change <input type="checkbox"/> Be Flexible <p>Initiative and Self-Direction</p> <ul style="list-style-type: none"> <input type="checkbox"/> Mange Goals and Time <input type="checkbox"/> Work Independently <input type="checkbox"/> Be Self-Directed Learners <p>Social and Cross-Cultural</p> <ul style="list-style-type: none"> <input type="checkbox"/> Interact Effectively with Other <input type="checkbox"/> Work Effectively in Diverse Teams <p>Productivity and Accountability</p> <ul style="list-style-type: none"> <input type="checkbox"/> Manage Projects <input type="checkbox"/> Produce Results <p>Leadership and Responsibility</p> <ul style="list-style-type: none"> <input type="checkbox"/> Guide and Lead Others <input checked="" type="checkbox"/> Be Responsible to Others
---	---	--

Unit 4 TOOL AND PLANT IDENTIFICATION**Hours: 92****Performance Assessment(s):**

Unit test
 Plant ID portfolio
 Unit quizzes
 Semester final

Leadership Alignment:

Floriculture CDE
 Self-directed learning

Standards and Competencies

PS.01.01: Classify agricultural plants according to taxonomy systems
 Level 1
 PS.01.01.01.a Explain systems used to classify plants
 Level 2
 PS.01.01.01.b.Compare and contrast the hierarchical classification of agricultural plants
 Level 3
 PS.01.01.01.c Classify agricultural plants according to the hierarchical classification system, life cycles, plant use and as monocotyledons or dicotyledons.
 PS.01.02: Apply knowledge of plant anatomy and the functions of plant structures to activities associated with plant systems
 Level 1
 PS.01.02.02.a Identify the components, the types and the functions of plant roots
 PS.01.02.03.a Identify the components and the functions of plant stems
 PS.01.02.04.a.Discuss Leaf morphology and the functions of leaves
 PS.01.02.05.a Identify the components of a flower, the functions of a flower and the functions of flower components
 PS.01.02.06.a.Explain the functions and components of seeds and fruit
 Level 2
 PS.01.02.04.b.Explain how leaves capture light energy and allow for the exchange of gasses
 PS.01.02.05.c Apply the knowledge of flower structure to plant breeding, production and use.

Aligned to Washington State Standards**Arts****Communication - Speaking and Listening****Health and Fitness****Language**

CC: College and Career Readiness Anchor Standards for Language

Conventions of Standard English

- 1 - Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- 2 - Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Vocabulary Acquisition and Use

4 - Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

6 - 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.

Mathematics

Reading

Science

Crosscutting Concepts

1. Patterns.
6. Structure and function.

Social Studies

Writing

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation

- Think Creatively
- Work Creatively with Other
- Implement Innovations

Creative Thinking and Problem Solving

- Reason Effectively
- Use Systems Thinking
- Make Judgements and Decisions
- Solve Problems

Communication & Collaboration

- Communicate Clearly
- Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy

- Access and Evaluate Information
- Use and Manage Information

Media Literacy

- Analyze Media
- Create Media Products

Information, Communications, and Technology (ICT Literacy)

- Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability

- Adapt to Change
- Be Flexible

Initiative and Self-Direction

- Manage Goals and Time
- Work Independently
- Be Self-Directed Learners

Social and Cross-Cultural

- Interact Effectively with Other
- Work Effectively in Diverse Teams

Productivity and Accountability

- Manage Projects
- Produce Results

Leadership and Responsibility

- Guide and Lead Others
- Be Responsible to Others

Unit 5 FLORAL DESIGN PRINCIPLES**Hours: 80****Performance Assessment(s):**

Unit quizzes
Performance evaluation
Self-reflection

Leadership Alignment:

Floriculture CDE
Self-reflection on arrangements

Standards and Competencies

PS.04.01: Create designs using plants.

Level 1

PS.04.01.01.a. Define design and identify design elements.

Level 2

PS.04.01.01.b. Explain design elements of line, form, texture and color and express the visual effect each has on the viewer.

PS.04.01.02.b. Discuss principles of design that form the basis of artistic impression.

Level 3

PS.04.01.01.c Select plants, hard goods, supplies and other materials for use in a design based on a range of criteria.

PS.04.01.02.c. Create and implement designs by following established principles of art.

CS.01.01: Action: Exhibit the skills and competencies needed to achieve a desired result.

Level 1

CS.01.01.01.a. Work productively with a group or independently.

Level 3

CS.01.01.01.c. Work independently and in group settings to accomplish a task.

CS.01.01.02.c. Assess outcomes to determine success for a task.

CS.01.01.04.c. Create resources to complete an action or project.

Aligned to Washington State Standards**Arts**

Arts 1.0 The student understands and applies arts knowledge and skills in dance, music, theatre, and visual arts.

1.1 Understands and applies arts concepts and vocabulary.

1.2 Develops arts skills and techniques.

Arts 2.0 The student demonstrates thinking skills using artistic processes.

- Reflects for the purpose of self-evaluation and improvement of the creative work.

- Refines work based on feedback, self-reflection, and aesthetic criteria.

2.2 Applies a performance and/or presentation process to the arts (dance, music, theatre and visual arts):

- Presents, exhibits, and produces work and/or performance for others.

- Reflects and self-evaluates work and/or performance to set goals.

Arts 4.0 The student makes connections within and across the arts to other disciplines, life, cultures and work.

4.5. Understands how arts knowledge and skills are used in the world of work including careers in the arts.

Communication - Speaking and Listening
Health and Fitness
Language
Mathematics
Reading
Science
Social Studies
Writing

21st Century Skills

<p>LEARNING AND INNOVATION</p> <p>Creativity and Innovation</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Think Creatively <input checked="" type="checkbox"/> Work Creatively with Other <input checked="" type="checkbox"/> Implement Innovations <p>Creative Thinking and Problem Solving</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Reason Effectively <input type="checkbox"/> Use Systems Thinking <input checked="" type="checkbox"/> Make Judgements and Decisions <input checked="" type="checkbox"/> Solve Problems <p>Communication & Collaboration</p> <ul style="list-style-type: none"> <input type="checkbox"/> Communicate Clearly <input type="checkbox"/> Collaborate with Others 	<p>INFORMATION, MEDIA AND TECHNOLOGY SKILLS</p> <p>Information Literacy</p> <ul style="list-style-type: none"> <input type="checkbox"/> Access and Evaluate Information <input type="checkbox"/> Use and Manage Information <p>Media Literacy</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Analyze Media <input checked="" type="checkbox"/> Create Media Products <p>Information, Communications, and Technology (ICT Literacy)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Apply Technology Effectively 	<p>LIFE AND CAREER SKILLS</p> <p>Flexibility and Adaptability</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adapt to Change <input checked="" type="checkbox"/> Be Flexible <p>Initiative and Self-Direction</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Mange Goals and Time <input checked="" type="checkbox"/> Work Independently <input type="checkbox"/> Be Self-Directed Learners <p>Social and Cross-Cultural</p> <ul style="list-style-type: none"> <input type="checkbox"/> Interact Effectively with Other <input type="checkbox"/> Work Effectively in Diverse Teams <p>Productivity and Accountability</p> <ul style="list-style-type: none"> <input type="checkbox"/> Manage Projects <input checked="" type="checkbox"/> Produce Results <p>Leadership and Responsibility</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Guide and Lead Others <input type="checkbox"/> Be Responsible to Others
---	---	--

Performance Assessment(s):

Unit test
 Produce an arrangement in the Ikebana style of design
 Portfolio

Leadership Alignment:

Global awareness

Standards and Competencies

PS.04.01: Create designs using plants.

Level 1

PS.04.01.01.a. Define design and identify design elements.

PS.04.01.02.a. Discuss the applications of art in agriculture/horticulture.

Level 2

PS.04.01.01.b. Explain design elements of line, form, texture and color and express the visual effect each has on the viewer.

PS.04.01.02.b. Discuss principles of design that form the basis of artistic impression.

Level 3

PS.04.01.01.c Select plants, hard goods, supplies and other materials for use in a design based on a range of criteria.

PS.04.01.02.c. Create and implement designs by following established principles of art.

CS.01.01: Action: Exhibit the skills and competencies needed to achieve a desired result.

Level 1

CS.01.01.01.a. Work productively with a group or independently.

Level 3

CS.01.01.01.c. Work independently and in group settings to accomplish a task.

CS.01.01.02.c. Assess outcomes to determine success for a task.

CS.01.01.03.c. Implement an effective project plan.

Aligned to Washington State Standards**Arts**

Arts 1.0 The student understands and applies arts knowledge and skills in dance, music, theatre, and visual arts.

1.1 Understands and applies arts concepts and vocabulary.

1.2 Develops arts skills and techniques.

Arts 2.0 The student demonstrates thinking skills using artistic processes.

- Uses ideas, foundations, skills and techniques to develop dance, music, theatre and visual art.

- Reflects for the purpose of self-evaluation and improvement of the creative work.

- Refines work based on feedback, self-reflection, and aesthetic criteria.

2.2 Applies a performance and/or presentation process to the arts (dance, music, theatre and visual arts):

- Analyzes the structure, context and/or aesthetics of the work.

- Presents, exhibits, and produces work and/or performance for others.

Arts 4.0 The student makes connections within and across the arts to other disciplines, life, cultures and work.

4.5. Understands how arts knowledge and skills are used in the world of work including careers in the arts.

Communication - Speaking and Listening
Health and Fitness
Language
Mathematics
Reading
Science
Social Studies
Writing

21st Century Skills

<p>LEARNING AND INNOVATION</p> <p>Creativity and Innovation</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Think Creatively <input type="checkbox"/> Work Creatively with Other <input checked="" type="checkbox"/> Implement Innovations <p>Creative Thinking and Problem Solving</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Reason Effectively <input type="checkbox"/> Use Systems Thinking <input checked="" type="checkbox"/> Make Judgements and Decisions <input checked="" type="checkbox"/> Solve Problems <p>Communication & Collaboration</p> <ul style="list-style-type: none"> <input type="checkbox"/> Communicate Clearly <input type="checkbox"/> Collaborate with Others 	<p>INFORMATION, MEDIA AND TECHNOLOGY SKILLS</p> <p>Information Literacy</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Access and Evaluate Information <input type="checkbox"/> Use and Manage Information <p>Media Literacy</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Analyze Media <input checked="" type="checkbox"/> Create Media Products <p>Information, Communications, and Technology (ICT Literacy)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Apply Technology Effectively 	<p>LIFE AND CAREER SKILLS</p> <p>Flexibility and Adaptability</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adapt to Change <input checked="" type="checkbox"/> Be Flexible <p>Initiative and Self-Direction</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Mange Goals and Time <input checked="" type="checkbox"/> Work Independently <input type="checkbox"/> Be Self-Directed Learners <p>Social and Cross-Cultural</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Interact Effectively with Other <input type="checkbox"/> Work Effectively in Diverse Teams <p>Productivity and Accountability</p> <ul style="list-style-type: none"> <input type="checkbox"/> Manage Projects <input checked="" type="checkbox"/> Produce Results <p>Leadership and Responsibility</p> <ul style="list-style-type: none"> <input type="checkbox"/> Guide and Lead Others <input type="checkbox"/> Be Responsible to Others
--	---	--

Unit 7 FLORAL SALES AND MARKETING**Hours: 80****Performance Assessment(s):**

Calculation of cost and profit margins of sales items
Determine supply order based on project needs and sales
Projections determine and implement marketing strategies
Demonstration of good customer service
Accurate money handling
Accurate billing record keeping in a floral shop setting

Leadership Alignment:

Floriculture CDE
Plant flower sales
Business and entrepreneurial literacy

Standards and Competencies

PS.03.05: Harvest, handle and store crops
Level 1
PS.03.05.03.a Identify storage methods for plants and plant products.
PS.03.05.04.a Explain the reasons for preparing plants and plant products for distribution.

PS.04.01: Create designs using plants.
Level 1
PS.04.01.01.a. Define design and identify design elements.
Level 2
PS.04.01.01.b. Explain design elements of line, form, texture and color and express the visual effect each has on the viewer.
Level 3
PS.04.01.01.c Select plants, hard goods, supplies and other materials for use in a design based on a range of criteria.
PS.04.01.02.c. Create and implement designs by following established principles of art.

Aligned to Washington State Standards**Arts****Communication - Speaking and Listening**

CC: College and Career Readiness Anchor Standards for Speaking and Listening

Presentation of Knowledge and Ideas

5 - Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

6 - Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Health and Fitness**Language****Mathematics**

CC: Mathematical Practices (MP)

- 1 - Make sense of problems and persevere in solving them.
- 6 - Attend to precision.

Reading

Science

Social Studies

Writing

CC: College and Career Readiness Anchor Standards for Writing

Text Types and Purposes

3 - Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Production and Distribution of Writing

6 - Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation

- Think Creatively
- Work Creatively with Other
- Implement Innovations

Creative Thinking and Problem Solving

- Reason Effectively
- Use Systems Thinking
- Make Judgements and Decisions
- Solve Problems

Communication & Collaboration

- Communicate Clearly
- Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy

- Access and Evaluate Information
- Use and Manage Information

Media Literacy

- Analyze Media
- Create Media Products

Information, Communications, and Technology (ICT Literacy)

- Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability

- Adapt to Change
- Be Flexible

Initiative and Self-Direction

- Manage Goals and Time
- Work Independently
- Be Self-Directed Learners

Social and Cross-Cultural

- Interact Effectively with Other
- Work Effectively in Diverse Teams

Productivity and Accountability

- Manage Projects
- Produce Results

Leadership and Responsibility

- Guide and Lead Others
- Be Responsible to Others

Unit 8 PLANT PROPAGATION**Hours: 10****Performance Assessment(s):**

Demonstrate sowing techniques
Preparation of media for plant propagation
Demonstration of various asexual techniques
Demonstration of techniques of separation
Division unit test
Monitor propagation with observations and accurate records
Determine and implement proper environmental condition

Leadership Alignment:

Floriculture CDE
Operation of school lab greenhouse

Standards and Competencies

PS.02.01: Determine the influence of environmental factors on plant growth

Level 1

PS.02.01.01.a. Describe the qualities of light that affect plant growth

Level 2

PS.02.01.01.b. Describe plant responses to light color intensity and duration

PS.02.01.02.b. Determine the optimal air, temperature, and water conditions for plant growth

Level 3

PS.02.01.01.c Evaluate plant responses to varied light color, intensity, and duration

PS.02.01.02.c Design, implement, and evaluate a plan to maintain optimal conditions for plant growth

PS.03.01: Demonstrate plant propagation techniques.

Level 1

PS.03.01.01.a Explain pollination, cross-pollination and self-pollination of flowering plants.

PS.03.01.02.a Demonstrate sowing techniques and provide favorable conditions for seed germination.

PS.03.01.03.a Describe optimal conditions for asexual propagation and demonstrate techniques used to propagate plants by cuttings, division, separation and layering

Level 2

PS.03.01.01.b Diagram the process of plant fertilization

PS.03.01.02.b Handle seed to overcome seed dormancy mechanisms and to maintain seed viability and vigor.

Level 3

PS.03.01.01.c Design and implement a plan to control the pollination of plants

PS.03.01.03.c Evaluate asexual propagation practices based on productivity and efficiency.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

Science

Science and Engineering Practices

- 1. Asking questions and defining problems
- 6. Constructing explanations and designing solutions

Crosscutting Concepts

- 2. Cause and effect: Mechanism and explanation.

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation

- Think Creatively
- Work Creatively with Other
- Implement Innovations

Creative Thinking and Problem Solving

- Reason Effectively
- Use Systems Thinking
- Make Judgements and Decisions
- Solve Problems

Communication & Collaboration

- Communicate Clearly
- Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy

- Access and Evaluate Information
- Use and Manage Information

Media Literacy

- Analyze Media
- Create Media Products

Information, Communications, and Technology (ICT Literacy)

- Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability

- Adapt to Change
- Be Flexible

Initiative and Self-Direction

- Mange Goals and Time
- Work Independently
- Be Self-Directed Learners

Social and Cross-Cultural

- Interact Effectively with Other
- Work Effectively in Diverse Teams

Productivity and Accountability

- Manage Projects
- Produce Results

Leadership and Responsibility

- Guide and Lead Others
- Be Responsible to Others

Performance Assessment(s):

Production of successful greenhouse products for sales
Unit test
Development of crop management plan

Leadership Alignment:

Business and entrepreneurial literacy
Floriculture CDE
Group work
Record keeping

Standards and Competencies

PS.01.03: Apply knowledge of plant physiology and energy conversion to plant systems

Level 1

PS.01.03.01.a Explain the basic process of photosynthesis and its importance to life on earth

PS.01.03.02.a.Explain Cellular respiration and its importance to plant life

PS.01.03.03.a Define primary growth and the role of the apical meristem

Level 2

PS.01.03.01.b.Explain requirements necessary for photosynthesis to occur and identify the products and by products of photosynthesis.

PS.01.03.02.b.Explain factors that affect cellular respiration and identify the products and by products of cellular respiration.

PS.01.03.03.b.Explain the process of secondary plant growth.

Level 3

PS.01.03.01.c.Explain the light –dependent and light –independent reactions that occur during photosynthesis and apply the knowledge to plant management

PS.01.03.04.c Select plant growth regulators to produce desired responses from plants.

PS.02.01: Determine the influence of environmental factors on plant growth

Level 1

PS.02.01.02.a. Describe the effects air, temperature, and water have on plant metabolism, and growth

Level 2

PS.02.01.01.b. Describe plant responses to light color intensity and duration

Level 3

PS.02.01.02.c Design, implement, and evaluate a plan to maintain optimal conditions for plant growth

PS.02.03: Develop and implement a fertilization plan for specific plants or crops

Level 1

PS.02.03.01.a. Identify the essential nutrients for plant growth and development and their major functions

PS.02.03.03.a Collect soil and plant tissue samples for testing and interpret the test results

PS.02.03.04.a. Identify fertilizer sources of essential plant nutrients, explain fertilizer formulations and describe different methods of fertilizer applications

Level 2

PS.02.03.01.b. Describe nutrient deficiency symptoms and recognize environmental causes of nutrient deficiencies

PS.02.03.04.b. Calculate the amount of fertilizer to be applied and calibrate equipment to apply the prescribed amount fertilizer

Level 3

PS.02.03.01.c. Monitor plants for signs of nutrient deficiencies and prepare a scouting report

PS.02.03.04.c. Use variable rate technology to apply fertilizers to meet crop nutrient needs.

PS.03.02: Develop and implement a plant management plan for crop production.

Level 1

PS.03.02.01.a Explain the importance of starting with pest-and disease-free propagation material.

PS.03.02.02.a Explain the reasons for preparing growing media before planting.

PS.03.02.03.a Demonstrate proper planting procedures and post-planting care.

PS.03.02.05.a Explain the reasons for controlling plant growth

Level 2

PS.03.02.01.b Inspect propagation material for evidence of pests or disease.

PS.03.02.03.b Apply pre--plant treatments required of seeds and plants and evaluate the results.

PS.03.02.04.b Monitor the progress of plantings and determine the need to adjust environmental conditions.

PS.03.02.05.b Demonstrate proper techniques to control and manage plant growth through mechanical, cultural or chemical means.

Level 3

PS.03.02.02.c Prepare growing media for planting.

PS.03.02.04.c Prepare and implement a plant production schedule based on predicted environmental conditions.

PS.03.02.05.c Create and implement a plan to control and manage plant growth.

CS.01.01: Action: Exhibit the skills and competencies needed to achieve a desired result.

Level 1

CS.01.01.01.a. Work productively with a group or independently.

CS.01.01.02.a. Create a task analysis.

CS.01.01.03.a. Exhibit good planning skills for a specific task or situation.

CS.01.01.06.a. Identify the strengths/talents of team members needed to achieve a desired task.

Level 2

CS.01.01.01.b. Demonstrate the ability to complete a task without assistance.

Level 3

CS.01.01.01.c. Work independently and in group settings to accomplish a task.

CS.01.01.02.c. Assess outcomes to determine success for a task.

CS.01.01.03.c. Implement an effective project plan.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

Science

Crosscutting Concepts

2. Cause and effect: Mechanism and explanation.

4. Systems and system models.

6. Structure and function.

Social Studies

Writing

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation

- Think Creatively
- Work Creatively with Other
- Implement Innovations

Creative Thinking and Problem Solving

- Reason Effectively
- Use Systems Thinking
- Make Judgements and Decisions
- Solve Problems

Communication & Collaboration

- Communicate Clearly
- Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy

- Access and Evaluate Information
- Use and Manage Information

Media Literacy

- Analyze Media
- Create Media Products

Information, Communications, and Technology (ICT Literacy)

- Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability

- Adapt to Change
- Be Flexible

Initiative and Self-Direction

- Manage Goals and Time
- Work Independently
- Be Self-Directed Learners

Social and Cross-Cultural

- Interact Effectively with Other
- Work Effectively in Diverse Teams

Productivity and Accountability

- Manage Projects
- Produce Results

Leadership and Responsibility

- Guide and Lead Others
- Be Responsible to Others

Performance Assessment(s):

SAE presentations
Record keeping
Reflection

Leadership Alignment:

Lifelong learning goals
Financial record
Keeping project record
Goal setting

Standards and Competencies

- SAE.01.01: Students will establish and conduct Supervised Agriculture Experience Projects (SAE).
- SAE.01.01.b. Explain the benefits of SAE projects to skill development, leadership and career success.
 - SAE.01.01.c. Explain the connection between SAE and FFA.
 - SAE.01.01.d. Explain the five types of SAE. (Entrepreneurship, Placement, Research, Exploratory, Improvement)
 - SAE.01.01.e. Explore ideas for SAE projects.
 - SAE.01.01.f. Explain how SAE projects support academic achievement.
 - SAE.01.01.g. Select and establish an SAE project.
 - SAE.01.01.h. Explain and keep records on established SAE projects.
 - SAE.01.01.i. Explain SAE project Supervision, visitation and assessment.
 - SAE.01.01.j. Explain how SAE projects benefit the community.
- CS.01.01: Action: Exhibit the skills and competencies needed to achieve a desired result.
- Level 1
- CS.01.01.01.a. Work productively with a group or independently.
 - CS.01.01.03.a. Exhibit good planning skills for a specific task or situation.
 - CS.01.01.04.a. Explore available resources to assist in meeting project needs.
 - CS.01.01.05.a. Assess the physical, financial and professional risks associated with a particular task.
 - CS.01.01.06.a. Identify the strengths/talents of team members needed to achieve a desired task.
 - CS.01.01.07.a. Set personal goals using the SMART goals method (Specific, Measurable, Approved by you, Realistic, Time-stamped).
- Level 2
- CS.01.01.03.b. Assess individual strengths and weaknesses in planning.
 - CS.01.01.04.b. Use appropriate and reliable resources to complete an action or project.
- Level 3
- CS.01.01.02.c. Assess outcomes to determine success for a task.
 - CS.01.01.03.c. Implement an effective project plan.
 - CS.01.01.05.c. Implement a plan that minimizes physical, financial, and professional risks and analyze results.
- CS.01.06: Continuous Improvement: Pursue learning and growth opportunities related to professional and personal aspirations.
- Level 1
- CS.01.06.05.a. Describe the value of being a life-long learner and the need for continuous development.
- Level 2
- CS.01.06.01.b. Develop a plan that includes specific goals for leadership and personal growth.
 - CS.01.06.02.b. Identify areas where a personal mentor could be helpful.

CS.01.06.05.b. Assess personal motivations and their impact on acquiring new knowledge and skills.
Level 3
CS.01.06.05.c. Implement a plan to develop new knowledge and skills related to professional and personal aspirations.

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

CC: College and Career Readiness Anchor Standards for Speaking and Listening

Comprehension and Collaboration

2 - Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Presentation of Knowledge and Ideas

4 - 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.

5 - Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Health and Fitness

Language

CC: College and Career Readiness Anchor Standards for Language

Conventions of Standard English

1 – Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

2 – Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Mathematics

Reading

CC: College and Career Readiness Anchor Standards for Reading

Key Ideas and Details

1 - 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.

Integration of Knowledge and Ideas

7 - Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.

Science

Social Studies

Writing

CC: College and Career Readiness Anchor Standards for Writing

Text Types and Purposes

1 - Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

2 - Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

Production and Distribution of Writing

4 - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

6 - Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge

7 - Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

8 - Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

Range of Writing

10 - Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation

- Think Creatively
- Work Creatively with Other
- Implement Innovations

Creative Thinking and Problem Solving

- Reason Effectively
- Use Systems Thinking
- Make Judgements and Decisions
- Solve Problems

Communication & Collaboration

- Communicate Clearly
- Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy

- Access and Evaluate Information
- Use and Manage Information

Media Literacy

- Analyze Media
- Create Media Products

Information, Communications, and Technology (ICT Literacy)

- Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability

- Adapt to Change
- Be Flexible

Initiative and Self-Direction

- Mange Goals and Time
- Work Independently
- Be Self-Directed Learners

Social and Cross-Cultural

- Interact Effectively with Other
- Work Effectively in Diverse Teams

Productivity and Accountability

- Manage Projects
- Produce Results

Leadership and Responsibility

- Guide and Lead Others
- Be Responsible to Others