



## Board/Authority Authorized Course: **Horticulture 10**

<b>School District/Independent School Authority Name:</b> Cowichan School District	<b>School District/Independent School Authority Number:</b> SD 79
<b>Developed by:</b> S Hillyard	<b>Date Developed:</b> February 19, 2020
<b>School Name:</b> Frances Kelsey Secondary	<b>Principal's Name:</b> J Rowan
<b>Superintendent Approval Date (for School Districts only):</b>	<b>Superintendent Signature (for School Districts only):</b>
<b>Board/Authority Approval Date:</b>	<b>Board/Authority Chair Signature:</b>
<b>Course Name:</b> Horticulture 10	<b>Grade Level of Course:</b> 10
<b>Number of Course Credits:</b> 4	<b>Number of Hours of Instruction:</b> 120
<b>Course Category:</b> Architecture & Environmental Design	<b>Course Code:</b> YAED-0A

**Board/Authority Prerequisite(s):** none

**Special Training, Facilities or Equipment Required:**

Instructor with training in Gardening or Horticultural, Field Classroom for Theory, Access to Natural Habitats, Field Trips to Nurseries and Gardens. Ideally, access and use of an exterior area, shed for storage, and a greenhouse area.

**Course Synopsis:**

Gardening and landscaping practices have a significant impact on the environment. The emphasis of this course is based on adopting and refining the principles of "sustainable gardening". The sustainable gardening concept is one that supports an approach to gardening with an emphasis on environmental protection. Students visit and observe natural habitats, and learn to skillfully recreate nature's beauty in domestic landscapes. This environmentally responsible gardening/landscaping course aims to provide hands-on learning opportunities for students.

**Goals and Rationale:**

The purpose of the Horticulture10 course is to introduce young people to plants, gardening, and landscaping. The course will prepare students for possible careers in horticulture, horticultural therapy, garden and landscape design, environmental studies, and forest industry programs.

**Indigenous Worldviews and Perspectives:**

- Apply First Peoples perspectives and, other ways of knowing, and local knowledge as sources of information
- Learning involves patience and time.
- Learning is holistic, reflexive, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place)
- Including as much experiential learning as possible
- Providing choice and flexibility in activities so that different aspects of the whole self can be attended to.
- Use of humour.
- Providing multiple access points for all learners in learning activities so that everyone can access opportunities for learning.

### BIG IDEAS

<p>To support the human population, we need <b>sustainable agriculture</b></p>	<p>People’s enjoyment of outdoor spaces can be influenced by plants and how they are placed.</p>	<p>Exposure to gardening and soil increases mental health and wellness.</p>	<p>Gardening reinforces students’ <b>sense of place</b>.</p>
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### Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <ul style="list-style-type: none"> <li>• Practice <b>sustainable gardening</b></li> <li>• Plan and plant <b>food crops</b>: maintaining orchards, berries, and vegetables</li> <li>• Design an <b>integrated pest management</b> approach to a specified plant problem</li> <li>• Apply the principles of sustainable gardening practices by creating a <b>landscape design</b>.</li> <li>• Prepare a list of plant varieties most suitable for growing in local regions</li> <li>• Explore the use of pesticides and its impact on the environment</li> <li>• Use and demonstrate sustainable gardening and landscaping practices, that leads to designing their own landscape plan.</li> <li>• Demonstrate a <b>sustainable landscape</b> plan                         <ul style="list-style-type: none"> <li>○ A landscape drawing labeled with scientific plant names</li> </ul> </li> </ul>	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> <li>• Learn the principles of sustainable gardening</li> <li>• Field identification of plant communities and natural habitats in the community</li> <li>• Identify disease and insects commonly found on food crops</li> <li>• Identify organic solutions for managing food crop plant diseases and insects</li> <li>• Explain and use the concept of <b>integrated pest management</b></li> <li>• Describe specific pruning methods of <b>crop plants</b> for maximizing yields</li> <li>• Learn common Latin names of popular plants</li> <li>• Review basic botany, plant life cycles, plant parts, as it relates to healthy plant growth and development</li> <li>• Identify common characteristics of native plants and plant communities</li> <li>• Demonstrate working knowledge of the <b>classification system of plants</b></li> </ul>

## Big Ideas – Elaborations

**Sustainable agriculture** – meeting society’s food and textile needs in the present without compromising the ability of future generations to meet their own needs

**Sense of Place:** Sense of place defines the identity, significance, meaning, intention, and felt value that are given to places by individuals (Pred 1983) as a result of experiencing it over time (Relph 1976; Tuan 1977).

## Curricular Competencies – Elaborations

**Sustainable gardening** - the concept of using gardening practices that cause no harm to the earth and its inhabitants while attempting to actually enhance it.

**Food crops** - small, 4’x8’ garden beds, similar to what would be found in a home garden.

**Integrated Pest Management** - Integrated pest management, also known as integrated pest control of is a broad-based approach that integrates practices for economic control of pests. IPM aims to suppress pest populations below the economic injury level.

**Landscape Design** – an independent profession and a design and art tradition, practiced by landscape designers, combining nature and culture. In contemporary practice, landscape design bridges the space between landscape architecture and garden design.

**Sustainable Landscaping** – is a variety of practices that have developed in response to environmental issues.

## Content – Elaborations

**Classification system of plants** – Plant kingdom contains all the known plants, approximately 300,00 plant species. As plants are classified into divisions, classes, orders, families, and genera more specific groupings of plants are found until each plant is specifically names.

**Integrated Pest Management** - Integrated pest management, also known as integrated pest control of is a broad-based approach that integrates practices for economic control of pests. IPM aims to suppress pest populations below the economic injury level.

### Recommended Instructional Components:

May include, but are not limited to: 1. Direct and indirect instruction 2. Paired, small group, and class discussions and tasks 3. Library and Internet research 4. Practical components in lab format with plants and plant samples brought into the classroom 5. Field trips 6. Guest Speakers 7. Videos

**Recommended Assessment Components: Ensure alignment with the [Principles of Quality Assessment](#)**

This course is assessed by using the Triangulation of Assessment, which allows the teacher to collect evidence of student learning; this evidence is collected from the following three sources: conversations, observations, and products.

The following **Principles of Quality Assessment** will be noted:

- Assessment is ongoing, timely, specific, and embedded in day to day instruction
- Student is involved in assessment and feedback
- Assessment focuses on all three components of the curriculum model - knowing, doing, understanding
- Assessment provides ongoing descriptive feedback to students

The students will play an active role throughout all stages of assessment to ensure that they feel ownership of their work and to hear and provide feedback about how they are doing, and where to next?

Each student will have a final conversation about their final product and the collected teacher data observations. This process gives the students a role in the assessment process and encourages the students to invest in their own learning. The teacher will use this information to make a final assessment on the three components of the curriculum model - knowing, doing, understanding and will determine if the student demonstrates the concepts and competencies relevant to Horticulture 10.

**Final grading** will be based on the following:

The goal for grade 10 is to understand and explore the core concepts of sustainable gardening, understand and explore the tenets of successful landscape design, and enjoy the success of growing at minimum, one food crop to fruition.

**Product:** Students will produce a scale diagram for a garden. Students will also design garden plots to incorporate the knowledge from the course as well as to bring alive theory into practice. They will also plant and nurse garden beds as a team, until the end of the semester.

**Observations and Conversations:** Will be ongoing throughout the course to offer feedback and to assess to what extent the student has developed the curricular competencies.

**Learning Resources:**

- Learning Resources will include, but are not limited to: Teacher generated resources
- Variety of plant and gardening books as available in school libraries
- Videos
- Library and Internet sources

- Community resources and associations related to horticulture