SCHOOL DISTRICT NO. 63 (SAANICH)

EDUCATION DIRECTIONS COMMITTEE AGENDA

Agenda

Committee Members: Board of Education:
Trustee Sheila Stelck, Chairperson
Trustee Nola Silzer
Trustee Teri VanWell

TBA (SAA) – elementary
Steve Newlove (SAA) – secondary
James Taylor (COPACS)
Don Peterson (STA)

Carly Hunter, Director of Instruction
Paul McKenzie, Assistant Superintendent *(regrets)*

Tuesday, January 14, 2020
3:00 pm. to 5:00 pm. – Board Room, School Board Office

Other Attendees: Melissa Austin, District Principal
Tracey Murphy, Stelly's Secondary School Teacher
Indigenous Leadership, NIŁ SE TŦE S,HIWEḰ E W̱SÁNEĆ W̱ILN̲EW̱, Stelly's Secondary. Students: Breanna Cooper, Kristin Morris, Kiara Child, Natalya Child, Edna Ellsworth, Dani Jack

1. PRESENTATIONS AND QUESTIONS

1. Indigenous Student Leadership at Stelly's – Stelly's Indigenous Leadership students

2. ITEMS FOR DISCUSSION

(None)

3. ITEMS FOR RECOMMENDATION

1. Board Authority/Authorised Courses
Staff Recommendation:
That the Board approve the following Board Authority/Authorised courses:
- Sustainable Gardening 11

4. ITEMS FOR INFORMATION

(None)

5. FUTURE AGENDA ITEMS

(None)

Sustainable Gardening 11 - Board/Authority Authorized Courses

School District/Independent School Authority Name: Saanich School District	**School District/Independent School Authority Number:** SD63
Developed by: Charlene Vopnfjord/Jon Siebert	**Date Developed:** December 2019
School Name: Stelly's Secondary	**Principal's Name:** Sally Hansen
Superintendent Approval Date (for School Districts only):	**Superintendent Signature (for School Districts only):**
Board/Authority Approval Date:	**Board/Authority Chair Signature:**
Course Name: Sustainable Gardening and Landscaping	**Grade Level of Course:** 11
Number of Course Credits: 4	**Number of Hours of Instruction:** 120 hrs

Board/Authority Prerequisite(s):

None.

Special Training, Facilities or Equipment Required:

- Instructor with training in Gardening or Horticultural and Food Preservation
- Field classroom for theory
- Access to natural habitats
- Field trips to nurseries, farms and gardens
- Garden space

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 sustainable food production. 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.

Rationale and Goals:

The purpose of the *Sustainable Landscaping and Gardening 11* course is to introduce young people to plants, gardening, and landscaping. Building, expanding and using various garden spaces at the school will build self sufficiency to ensure food security knowledge, produce food for the school and community and provide useful skills for the future. The spaces will be shared and accessed by the school community and across curriculums. The course will prepare students for possible careers in horticulture, horticultural therapy, garden and landscape design, environmental studies.

Aboriginal 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.

Course Name: Sustainable Gardening **Grade: 11**

BIG IDEAS

, Urban food security is enhanced through the practice of sustainable agriculture.	Gaining food production experience leads to entrepreneurial skill and competency building.	Exposure to gardening and soil increases mental health and wellness and reinforces students sense of place.	Food production connects students with their peers, local businesses, Indigenous culture and community.	The growing cycle of plants and food production leads to leads to food related issues in society.

Learning Standards

Curricular Competencies	Content
Students are expected to do the following: • Practice sustainable urban agriculture • Plan and plant food crops: maintaining orchards, berries, and vegetables • Explore the topic of 'Food Security" • Design an integrated pest management approach to a specified plant problem • Explore various composting and natural fertilization techniques • Apply the principles of food preservation techniques • Apply the principles of sustainable gardening practices by creating a • landscape design. • Prepare a list of plant varieties most suitable for growing in local regions • Explore and the uses of Indigenous plants. Learn how to identify/plant/grow/harvest and prepare these plants in consultation with local Indigenous people. • Prepare produce for consumption in the community • Explore the use of pesticides and its impact on the environment • Use and demonstrate sustainable gardening and landscaping practices, that leads to designing their own landscape plan. • Demonstrate a sustainable landscape plan	*Students are expected to know the following:* • Learn the principles of sustainable gardening • Field identification of plant communities and natural habitats in the community, • Identify disease and insects commonly found on food crops • Identify organic solutions for managing food crop plant diseases and insects • Learn about various composting techniques • Practice food security methods through food preservation techniques such as; cooking, canning, drying, pickling, smoking and fermentation. • Describe specific pruning methods of crop plants for maximizing yields • Learn common Latin names of popular plants • Review basic botany, plant life cycles, plant parts, as it relates to healthy plant growth and development • Identify common characteristics of native plants and plant communities

-A landscape drawing labeled with scientific plant names	• Learn the uses of Indigenous plants and traditional growing/harvesting/preservation techniques. • Demonstrate working knowledge of the classification system of plants.

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).

Local food and agriculture: Study of the cycle of food through planning, planting, tending, harvesting, eating, preserving, sharing and seed collection.

Curricular Competencies – Elaborations

Students are expected to do the following:

- 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: growing in various environments such as vertical growing techniques, 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 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 – a variety of practices that have developed in response to environmental issues.

Content – Elaborations
Students are expected to know: • **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 is a broad-based approach that integrates practices for economic control of pests. IPM aims to suppress pest populations below the economic injury level. • **Care and preservation** of produce to ready for community use - Stelly's Foods classes, Cafe, Farm Stand, local restaurants, local markets.

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. Elders and 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
- Assessment rubric indicators: emerging, developing, proficient, extending
- 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 Gardening 11.

Final grading will be based on the following:

Product: Students will produce scale diagrams for gardens and their own garden plots. They will also plant and nurse their garden beds until the end of the semester.

Documentation: Students will keep a logbook/journal, use a digital notebook to record stages of development, make before, during and after videos of their perceptions and how they may shift

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
- Materials, resources, workshops, etc
- Various short videos and TED Talks
- Guest Speakers
- Elders
- Field trips/workshops
- Online Apps and websites