



Board/Authority Authorized Course
Charles Bloom
Logging 11

School District/Independent School Authority Name: Vernon School District	School District/Independent School Authority Number (e.g. SD43, Authority #432): SD#22
Developed by: Martin Tooms	Date Developed: April 2019
Superintendent Approval Date (for School Districts only): June 19, 2019	Superintendent Signature (for School Districts only): On course form
Board/Authority Approval Date: June 19, 2019	Board/Authority Chair Signature: On course form
Course Name: Logging 11	Grade Level of Course: 11
Number of Course Credits: 4	Number of Hours of Instruction: 120

Board/Authority Prerequisite(s): Students should do a field tour of program activities, submit an application and an educational plan, and be prepared to have an interview with the program instructor and school counsellor. Regular attendance, physical fitness, good listening skills, a high degree of safety consciousness, and a willingness to be a team player are all expected of forestry students.

Special Training, Facilities or Equipment Required: PPE (Personal Protective Equipment) including:

CSA approved hi-vis hardhat with mesh visor, and earmuffs, WorkSafe approved safety pants for chainsaw use, CSA approved safety work boots, Hi-vis vest, Work gloves, Safety glasses, All weather outerwear. The course instructor shall be a B.C. certified Technology I Industrial Education teacher, with Enform Level 1 Chainsaw certification, OFA Level 3 certified, and physically fit. To supervise and instruct at Woodlot 1908, heavy equipment operation and maintenance experience will be an asset.

Course Synopsis:

Logging 11 provides students with both classroom knowledge and hands-on experience in the safe operation of timber harvesting equipment in accordance with WorkSafe BC and Industry standards. Charles Bloom's Woodlot 1908 provides an excellent training and instructional area for

harvesting operations. The course provides students with the skills for the safe operation of chainsaws, brush saws, and shop manufacturing equipment. The program builds on teamwork to better instruct in the safety aspects of the industry. The course provides the opportunity for students to identify commercial tree species on Woodlot 1908, and the value they contribute to our society. Students are generally in the field 3 out of 5 days of the week: safe and efficient logging methods are learned through practical experience in virtually all-weather conditions. Student led firewood sales help subsidize some of the equipment costs.

Goals and Rationale:

Logging 11 will help develop curricular competencies, understandings, and critical thinking around logging and sustainable forestry practices. Charles Bloom Secondary School has a Federation of BC Woodlot Association award-winning, unique woodlot program that provides students both practical fieldwork and theoretical study in all aspects of modern forest management, logging, forest recreation, community connections, and an incorporation of the First Peoples Principles of Learning and indigenous ways of knowing related to sustainable natural resource use. Students come from a wide variety of backgrounds and from all the secondary schools of the district. The program provides students with transferrable skills applicable to numerous fields of study and employment.

Indigenous Worldviews and Perspectives:

Intended for all learners, this course will explore indigenous ways of knowing and how they can benefit all students. We strive to create teaching and learning environments that reflect First Peoples Principles of Learning (FPPL), including:

Sustainable and appropriate forest practices support the wellbeing of the community, the family, and the land.

Learning is experiential, reflective, and connected to the land.

Forest management and resource use is connected to story, tradition, responsibility, and identity

Knowledge is passed from generation to generation.

Elders' knowledge of the land is respected and honored.

The community is involved in decisions around resource harvesting.

BIG IDEAS

Forest management requires active field work and hands on practice	Forestry involves technology and equipment that requires competencies in operation, maintenance, and repair	Forest products have social, economic, and cultural value	Student and worker safety in an industrial forest setting is the first consideration
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Learning Standards

Curricular Competencies	Content
<i>Students are expected to do the following:</i> Develop and communicate an understanding of the local economic impact of primary processing of forest materials. Understand the environmental implications of modern forest practices and use of forest resources in a Value-Added manner. Recognize First Peoples perspectives and knowledge around the use of forest resources for economic, social, and cultural purposes, understand the connection of the land to a positive personal and cultural identity Describe the relationships between forest users and consumers of timber and lumber goods Use, maintain, and repair appropriate tools and equipment for forest management and primary processing. Prepare and inspect basic timber products for quality, consistency, moisture content, and other important factors. Demonstrate the proper use of safety equipment in an industrial forestry setting and in primary processing activities. Apply the basic principles of first aid, after completing the OFA (Occupational First Aid) Level One course.	<i>Students are expected to know the following:</i> Modern forestry practices have to consider environmentally sustainable, appropriate use of the resource Forests are shared by many user groups, who have overlapping interests in forest health Operation, maintenance, and repair of a variety of forestry tools and equipment Safe work practices and the proper use of Personal Protective Equipment OFA (Occupational First Aid) level1 Principles of limbing and bucking

Big Ideas – Elaborations

Forest management requires active field work and hands on practice

Sample questions to support student inquiry:

How does practical work on an active woodlot add to your forest management skills?

Forestry involves technology and equipment that requires competencies in operation, maintenance, and repair

Sample Questions to Support Student Inquiry:

How does the use and maintenance of forest management equipment add to your practical experience?

Forest products have asocial, economic, and cultural value

Sample Questions to Support Student Inquiry:

How does understanding the importance of forest products through the lenses of (social economic, and cultural) improve students' understanding of their value?

Student and worker safety in an industrial forest setting is the first consideration

Sample Questions to Support Student Inquiry:

What is having safety instruction, expectations, and Personal Protective Equipment use consistently taught and reinforced critical?

What are some of the risks and hazards of working in the woods?

Curricular Competencies – Elaborations

Develop and communicate an understanding of the local economic impact of primary processing of forest materials.

Sample opportunities to support inquiry with students:

Describe the variety of primary processing activities that take place in the North Okanagan

Present to the class on one local processor

Understand the environmental implications of modern forest practices and use of forest resources in a value-added way.

Sample opportunities to support inquiry with students:

What are 3 ways that forestry in BC has changed and become more sustainable over the last 100 years?

How is Oriented Strand Board produced?

What are some of the ways that low-value forest resources have been turned into higher value products?

Recognize First Peoples perspectives and knowledge around the use of forest resources for economic, social, and cultural purposes, understand the connection of the land to a positive personal and cultural identity

Sample opportunities to support inquiry with students:

How are First Nations communities consulted and involved in forest resource management?

Research a First Nations owned forestry-company and their products.

Describe the relationships between forest users and consumers of timber and lumber goods

Sample opportunities to support inquiry with students:

Describe 5 common products that we use from the forest.

Show how lumber is valued and sold to mills.

Review a lumber package for framing a house.

Describe how engineers test the strength of wood products

Use, maintain, and repair appropriate tools and equipment for forest management and primary processing.

Sample opportunities to support inquiry with students:

Describe the different types of sawmills.

Create a poster that shows the pathway from forest to lumber yard

Describe the process for sharpening bandsaw mill blades

Demonstrate how to setup, maintain, and cleanup the bandsaw mill

Content – Elaborations

How do forestry practices consider environmental sustainability and appropriate resource use?

Sample opportunities to support student inquiry:

How is BC's Annual Allowable Cut determined?

Selective Logging practices vs Clear Cutting.

What are some factors that determine the success of silviculture programs?

Forests are shared by many user groups with overlapping interests in forest health

Sample opportunities to support student inquiry:

Research and describe how land use is determined in BC, including

Logging

Hunting

Forest Recreation Sites

Understand the wide variety of forestry tools and equipment including:

Content – Elaborations

Chainsaw operation, cleaning, adjusting, and sharpening
Crawler/Dozer operation, safety inspection, oil changes, and routine maintenance.
Skidder operation, safety checks, routine maintenance.
Firewood prep

Know safe work practices and the proper use of Personal Protective Equipment including:

Personal Safety attitudes and equipment
Job site safety and safe work habits
Environmental safety / cleaning up fuel spills

Recommended Instructional Components:

Logging 11 takes place both in the classroom and on woodlot 1908. Much of the class time is experiential and place- based, working in the woods with expert guidance. The class makes use of a wide variety of guest speakers, forest professionals, First Nations teachers, Technology/ Industrial Education teachers, and resource managers. There will be elements of direct instruction, demonstrations, and much practical work.

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

Classroom assessments are mostly project based and reflective, Goal setting at the start of each term, Quizzes on safety, student demonstrations, Daily work logs and journaling

Learning Resources:

Woodlot 1908, Guest Speaker, Online resources: BC Council of Forest Industries, Healthy Forests - Healthy Communities, Canadian Institute of Forestry, BC Forest Safety Council, First Nations Educational Steering Committee, <https://interiorlogging.org>, Forestry Tools and Equipment
SD22 Story of Our Ways

Additional Information:

Forestry at Charles Bloom is a unique program that serves students with a broad range of learning styles and learning goals. For more information, please contact Mr. Martin Tooms. MTooms@sd22.bc.ca



Ministry of
Education

BOARD/AUTHORITY AUTHORIZED (BAA) COURSE FORM

PART A: BAA COURSE VERIFICATION STATEMENT - To be completed by District Superintendent, Independent School or Offshore School Principal

Prior to submitting the attached BAA Course Framework to the Board/Authority for approval, I Joe Rogers, Superintendent verify that I have reviewed the BAA Course to ensure that it is fully compliant with the *School Act* (if offered by a Board or Offshore School), the *Independent School Act* (if offered by an Independent School Authority), the *Board Authorized Course Order*, policy document *Board/Authority Authorized Courses: Requirements and Procedures*, and for ELL courses the ELL Guidelines: *Template for BAA Language Acquisition/Culture Courses*.

By signing below, I verify that the BAA Course:

- is not preparatory, remedial, or modified
- does not significantly overlap with current provincial curriculum
- name reflects the subject area and includes the grade level
- assigned grade level reflects the appropriate level of instruction
- credit value appropriately reflects the length and scope of the course
- synopsis clearly outlines what a student has gained when the course is completed
- rationale outlines the reasons for wanting to offer opportunities to study the course
- organizational structure outlines the specific topics, units or modules which include the learning outcomes, instruction and assessment components, and time allotments
- learning outcomes are assessable and observable and can be understood by students and parents
- instructional component clarifies learning outcomes and provides a range of pedagogical opportunities
- assessment component provides formative and summative opportunities to assess student achievement
- learning resources are age appropriate, support learning outcomes and diversity of learning rates and styles.

Course Name Logging

Grade 11

Course Code

School District Name and Number 22 (Vernon)

Independent School Name and School Number

Name of District Superintendent/Independent or Offshore School Principal Joe Rogers, Superintendent of

Signature [Signature]

Date 06/19/2019

PART B: BAA COURSE AUTHORIZATION STATEMENT - To be completed by Board/Authority Chair or Designate

A signed copy of this document must be submitted to the Student Certification Branch. The original document and accompanying BAA Course Framework must be retained by the district/school for submission to the Ministry upon request.
(Board Authorized Course Order, M285/04, s. 3; Educational Standards Order, M41/91, s. 5 (2)(c))

Name of Board/Authority Chair or Designate Robert Lee, Board Chair

Signature [Signature]

Date 06/19/2019

I declare that this BAA course is approved by the Board/Authority

PART C: FOR INDEPENDENT SCHOOLS ONLY BAA INSPECTOR CONFIRMATION

To be completed by Inspector of Independent Schools or Designate during regular inspection/monitoring visit

A signed copy of this document (Parts A and C) must be retained for submission to the Ministry upon request.

The BAA course noted above is fully compliant with the *Independent School Act* and the BC Ministry of Education requirements outlined in the policy document *Board/Authority Authorized Courses: Requirements and Procedures*. (Educational Standards Order, M41/91, s. 5(2)(c))

Name Inspector of Independent Schools or Designate

Signature

Date

Send Completed Form to Student Certification Branch
Email student.certification@gov.bc.ca

Revised October 26, 2016