ORIGINAL COURSE IMPLEMENTATION DATE: January 2004
REVISED COURSE IMPLEMENTATION DATE: January 2024
COURSE TO BE REVIEWED (six years after UEC approval)**:** April 2029
Course outline form version: 09/08/2021

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: AGRI 129	**Number of Credits:** 3 Course credit policy (105)
Course Full Title: Horticulture Skills II **Course Short Title:** Horticulture Skills II	
Faculty: Faculty of Science	**Department (or program if no department):** Agriculture Technology

Calendar Description:

Technical skills including tissue culture, sprayer calibration, pruning, and grafting will be practiced. Activities will take place in the lab, Agriculture outdoor classroom, or greenhouse.

Note: Field trips outside of class time will be required. Please check with the department for details.

Prerequisites (or NONE):	None.
Corequisites (if applicable, or NONE):	None.
Pre/corequisites (if applicable, or NONE):	None.

Antirequisite Courses *(Cannot be taken for additional credit.)*

Former course code/number: **AGRI 125, AGRI 225, AGRI 281**

Cross-listed with:

Equivalent course(s):

(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)

Typical Structure of Instructional Hours

Lecture/seminar	15
Experiential (work-integrated learning)	30
Total hours	**45**

Scheduled Laboratory Hours

Labs to be scheduled independent of lecture hours: ☒ No ☐ Yes

Course Details

Special Topics course: **No**

(If yes, the course will be offered under different letter designations representing different topics.)

Directed Study course: **No**

(See policy 207 for more information.)

Grading System: **Letter grades**

Delivery Mode: **Face-to-face only**

Expected frequency: **Annually**

Maximum enrolment (for information only)**: 25**

Prior Learning Assessment and Recognition (PLAR)

PLAR is available for this course.

Transfer Credit *(See **bctransferguide.ca**.)*

Transfer credit already exists: **Yes**

Submit outline for (re)articulation: **Yes**

(If yes, fill in transfer credit form.)

Department approval	**Date of meeting:**	November 2022
Faculty Council approval	**Date of meeting:**	December 2, 2022
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	April 21, 2022

Learning Outcomes *(These should contribute to students' ability to meet program outcomes and thus Institutional Learning Outcomes.)*

Upon successful completion of this course, students will be able to:

1. Setup and troubleshoot simple irrigation systems.
2. Prune fruit trees and berry crops.
3. Describe current topics in horticulture research.
4. Explain the principles of plant tissue culture and its applications in horticulture.
5. Perform basic micropropagation of woody, herbaceous, and Indigenous plant species.
6. Calibrate backpack sprayers.
7. Start commercial and Indigenous plants from seed, selecting appropriate conditions based on packet recommendations.
8. Graft fruit trees using at least three types of grafting.
9. Explain the principles of seed germination and seed viability testing.

Recommended Evaluation Methods and Weighting *(Evaluation should align to learning outcomes.)*

Quizzes/tests:	30%	Assignments:	40%	Final exam:	30%

Details:

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Texts and Resource Materials *(Include online resources and Indigenous knowledge sources. Open Educational Resources (OER) should be included whenever possible. If more space is required, use the Supplemental Texts and Resource Materials form.)*

	Type	Author or description	Title and publication/access details	Year
1.	Textbook	M. McMahon	Plant Science: Growth, Development, and Utilization of Cultivated Plants	2019
2.				
3.				
4.				
5.				

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

Students must have pruners, pocketknife, CSA (Canadian Safety Association) approved footwear, work gloves, rain gear, lab coat, calculator, transportation to field trips.

Course Content and Topics

- Irrigation design and assembly
- Pruning
- Pacific Agriculture Show
- Introduction to tissue culture, sterile technique
- Vegetative/nodal cuttings and media
- Non-vegetative techniques
- Calibration of sprayers
- Seeding, stratification, and germination
- Grafting
- Seed viability testing, seed banks