

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

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

<b>Course Code and Number:</b> AGRI 124		<b>Number of Credits:</b> 3 <a href="#">Course credit policy (105)</a>													
<b>Course Full Title:</b> Introduction to Horticulture <b>Course Short Title:</b> Introduction to Horticulture															
<b>Faculty:</b> Faculty of Science		<b>Department (or program if no department):</b> Agriculture Technology													
<b>Calendar Description:</b> Introduction to plant anatomy and physiology; physical, biological, and chemical (hormones) control of plant growth; and postharvest handling. Overview of plant taxonomy and biological nomenclature. Develops knowledge base needed to continue studying major horticultural crop groups. Note: Field trips outside of class time will be required. Please check with the department for details.															
<b>Prerequisites (or NONE):</b>		None.													
<b>Corequisites (if applicable, or NONE):</b>		None.													
<b>Pre/corequisites (if applicable, or NONE):</b>		None.													
<b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i> Former course code/number: Cross-listed with: Equivalent course(s): <i>(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.)</i>		<b>Course Details</b> Special Topics course: <b>No</b> <i>(If yes, the course will be offered under different letter designations representing different topics.)</i> Directed Study course: <b>No</b> <i>(See <a href="#">policy 207</a> for more information.)</i> Grading System: <b>Letter grades</b> Delivery Mode: <b>Face-to-face only</b> Expected frequency: <b>Annually</b> Maximum enrolment (for information only): <b>25</b>													
<b>Typical Structure of Instructional Hours</b> <table border="1"> <tr> <td>Lecture/seminar</td> <td>30</td> </tr> <tr> <td>Supervised laboratory hours (science lab)</td> <td>15</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td><b>Total hours</b></td> <td><b>45</b></td> </tr> </table>		Lecture/seminar	30	Supervised laboratory hours (science lab)	15							<b>Total hours</b>	<b>45</b>	<b>Prior Learning Assessment and Recognition (PLAR)</b> PLAR is available for this course.	
Lecture/seminar	30														
Supervised laboratory hours (science lab)	15														
<b>Total hours</b>	<b>45</b>														
<b>Scheduled Laboratory Hours</b> Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		<b>Transfer Credit</b> <i>(See <a href="#">bctransferguide.ca</a>.)</i> Transfer credit already exists: <b>Yes</b> Submit outline for (re)articulation: <b>Yes</b> <i>(If yes, fill in <a href="#">transfer credit form</a>.)</i>													
<b>Department approval</b>		<b>Date of meeting:</b> November 2022													
<b>Faculty Council approval</b>		<b>Date of meeting:</b> December 2, 2022													
<b>Undergraduate Education Committee (UEC) approval</b>		<b>Date of meeting:</b> 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. Explain history of horticulture and describe different horticulture sectors.
2. Explain plant classifications and nomenclature, and life cycles of flowering plants.
3. Describe plant anatomy and function from the cell organelle level to cell types, tissue systems, and organs, pollination, and fertilization.
4. Explain functions of the naturally occurring plant hormones and how they influence plant growth.
5. Describe photosynthesis and respiration.
6. Describe how photosynthesis and respiration are influenced by the following environmental factors: light, temperature, water, gases, plant nutrition.
7. Summarise the function of the key plant nutrients.
8. Describe how water and plant metabolites are moved throughout plants.
9. Describe transpiration.
10. Identify 14 important commercial and Indigenous plants to the Fraser Valley including family, genus, and species, propagation, etc.

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

Quizzes/tests:	40%	Final exam:	20%	Assignments:	40%
	%		%		%

**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	McMahon, M.	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.)***Course Content and Topics**

- Horticulture history
- Horticulture sectors
- Nomenclature and different forms of classification
- Plant anatomy; cell and tissues
- Plant anatomy; vegetative organs and modifications
- Plant reproduction, pollination, and fertilization
- Plant growth regulators
- The leaf and photosynthesis
- Respiration and storage
- Environmental factors affecting plant growth and development
- Plant nutrition
- Plant water; transport in plants