

## **Kwantlen Polytechnic University (KPU) Approved Course List for Registration with the Agrology Profession in British Columbia**

*The list includes courses from a number of faculties as determined by the Department of Horticulture and Agriculture plus Department of Geography and the Environment that includes electives for the degree programs.*

To be registered as an Articling Agrologist (AAg) leading to the Professional Agrologist (PAg) designation, applicants must have obtained:

A Bachelor's Degree with a science focus from a recognized university of which the course work must consist of the following:

a. A minimum of 8 entry level foundational knowledge courses, usually at the 100 or 200 level, in the subject matters listed on the Academic Worksheet. Applicants may have more than 1 entry level course in the same subject matter and cannot double count in the other two sections of the worksheet.

**These can include courses in:**

- |                      |  |
|----------------------|--|
| - biology            | - microbiology   |
| - biochemistry       | - geology  |
| - hydrology          |  |
| - genetics           | <b>May include courses that are of benefit to<br/>the study of natural sciences or agrology:</b> |
| - chemistry          | - math   |
| - earth sciences     | - statistics   |
| - hydrogeology       | - computer science   |
| - physical geography | - economics  |
| - physics            | - communications/Writing   |
| - ecology            |  |

b. At least 20 courses in natural sciences and/or agricultural and resource economics that relate directly to agrology (as defined by the *Agrologists Act 2003*).

c. At least 8 senior level courses (can come from within the above noted 20 course requirement) in natural sciences and/or agricultural and resource economics that relate directly to agrology (as defined in the *Agrologists Act, 2003*). Only senior courses (3rd year level and higher) taught by a Recognized University are recognized as senior level courses.

Courses that are considered eligible for meeting the coursework requirements for BCIA registration are listed in the following categories: Agrology, Foundational Natural Science; Mathematics or Statistics; Economics, Communications /Writing and Computer Science. *The Credentials Committee has the authority to limit how many foundational courses are accepted in each subject matter.*

\*Course requires supporting documentation; may or may not be accepted depending on subject matter

This course listing is a guideline only; the Credentials Committee determines eligibility based on a comprehensive course by course review ensuring the academic worksheet is optimized while remaining within the minimum registration requirements.

### 100-200 Agrology Courses

Course ID	Title
AGRI 1150	Sustainable Agriculture for the 21 <sup>st</sup> Century
AGRI 2190	Plant Science
AGRI 2220	Soil Stewardship and Management
AGRI 2240	Ecologically Based Pest Management
AGRI 2250	Agriculture and Food Systems
AGRI 2320	Advanced Soil Management
ECON 2260	Environmental Economics
ENVI 1106	Environmental Chemistry
ENVI 2305	Environmental Toxicology
ENVI 2310	Solid Waste Management
ENVI 2315	Water and Soil Sampling
ENVI 2410	Water Resources Protection
ENVI 2420	Contaminated Sites Management
GEOG 1110	Atmospheric Science
GEOG 2310	Climatology
GEOG 2320	Geomorphology
GEOG 2390	Quantitative Methods in Geography
GEOG 2400	Introduction to GIS
HORT 1102	Botany for Horticulture
HORT 1104	Soils and Growing Media
HORT 1110	Introduction to Sustainable Horticulture
HORT 1155	Introduction to Plant Materials
HORT 1217	Foundations of Plant Health
HORT 1230	Sustainable Turf Management
HORT 1240	Arboriculture I
HORT 1261	Plant Propagation
HORT 2308	Landscape Pest Management
HORT 2327	Sustainable Landscape Design I
HORT 2333	Turfgrass Pest Management
HORT 2334	Irrigation and Drainage Practices
HORT 2355	Plant Materials II
HORT 2375	Production Facilities and Systems
HORT 2378	Production Horticulture Pests
HORT 2442	Arboriculture II
HORT 2463	Woody Plant Production and Development
HORT 2473	Greenhouse Climate Control
HORT 2490	Organic Crop Production

### 300-400 Agrology Courses

AGRI 3150	Agriculture and Energy
AGRI 3225	Experimental Design & Analysis
AGRI 3260	Animal Agriculture

AGRI 3270	Vegetable Crop Production
AGRI 3280	Fruit and Nut Crop Production
AGRI 3290	Agroecosystem Management I
AGRI 3390	Agro-Ecosystems Management II
AGRI 3398	Crop Physiology and Ecology
AGRI 3591*	Special Topics in Food Systems I
AGRI 4190	Agro-Ecosystems Management III
AGRI 4298	World Trends in Agriculture
AGRI 4299*	Research Project II
BIOL 3165	Conservation Biology
BIOL 3225	Biology of Plants: An Ecological and Evolutionary Perspective
GEOG 3320	Environment and Resources
GEOG 3330	Hydrology
GEOG 3340	Biogeography
GEOG 3390	Methods in Environmental Geography
GEOG 4100*	Research Design in Geography – Physical Geography topic
GEOG 4320	Advanced Studies in Geomorphology
GEOG 4350	Climate Change
GEOG 4380	Application in GIS
GEOG 4501*	Current Geographic Issues
GEOG 4599*	Directed Studies
HORT 3230	Urban Watershed Planning
HORT 3250	Monitoring, Inventory and Assessment of Plant Communities
HORT 3270	Urban Agriculture
HORT 3310	Entomology
HORT 3320	Plant Pathology
HORT 3330	Biological Control in Pest Management
HORT 3360	Scouting, Monitoring and Assessment of Pests
HORT 4231	Riparian Management
HORT 4340	Pest Management
HORT 4350	Environmental Effects of Plant Health Management
HORT 4370	National and Global Regulatory Issues
HORT 4440	Vegetation Management
HORT 4599 *	Special Topics in Horticulture
HORT 4810 *	Applied Research Project 1 Horticulture

### Foundational Natural Science Courses

Course ID	Title
BIOL 1110	Introductory Biology I
BIOL 1210	Introductory Biology II
BIOL 2322	Ecology
CHEM 1103	Introductory Chemistry
CHEM 1110	The Structure of Matter
CHEM 1210	Chemical Energetics and Dynamics
GEOG 1102	Introduction to Physical Geography

GEOG 1110	Atmospheric Science
GEOG 1120	Earth Science
PHYS 1101	Physics for Life Sciences I
PHYS 1102	Physics for Life Sciences II
PHYS 1120	Physics for Physical and Applied Sciences I
PHYS 1220	Physics for Physical and Applied Sciences II
PHYS 1400	Energy, Environment, Physics

### Mathematics or Statistics Courses

Course ID	Title
MATH 1115	Statistics 1
MATH 1117	Environmental Math
MATH 1120	Differential Calculus
MATH 1130	Calculus for Life Sciences I
MATH 1220	Integral Calculus
MATH 1230	Calculus for Life Sciences II

### Economics, Communications/Writing Courses

Course ID	Title
AGRI 2230	Sustainable Human Economy
ECON 1250	Principles of Macroeconomics
ENGL 1100	Introduction to University Writing
GEOG 2380	Qualitative Methods in Geography

### Computer Science Courses

Course ID	Title
CPSC 1103	Principles of Program Structure and Design I