

University of the Fraser Valley Approved Course List for Registration with the Agrology Profession in British Columbia

*List includes courses from the Departments of Biology, Geography,
and Bachelor of Agricultural Science – Horticulture.*

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:

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

b. At least 20 courses in agricultural **or** natural sciences **or** agricultural **or** resource economics that relate directly to agrology (as defined by the *Agrologists Regulation, 2021*).

c. At least 8 senior level courses (can come from within the above noted 20 course requirement) in agricultural **or** natural sciences **or** agricultural **or** resource economics that relate directly to agrology (as defined by the *Agrologists Regulation, 2021*). 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. If any courses at 1 credit they are bundled together to equal one 3 credit course.*

*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 |
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| AGRI 112 | Soil Fertility and Fertilizers |
| AGRI 123 | Horticulture Skills and Techniques for Fall |
| AGRI 124 | Introduction to Horticulture |
| AGRI 126 | Agriculture Pests & Pesticide Licensing |
| AGRI 129 | Horticulture Skills and Techniques for Winter |
| AGRI 130 | Principles of Sustainable Agriculture Practices |
| AGRI 143 | Introduction to Agriculture |
| AGRI 163 | Pest Biology and Identification |
| AGRI 203(was AGRI 200) | Fundamentals of Pest Management |
| AGRI 204 | Introduction to Soils and Soil Fertility |
| AGRI 205 | Integrated Pest Management Techniques and Equipment |
| AGRI 210* | Directed Studies in Agriculture |
| AGRI 212(was AGRI 121) | Introduction to On-Farm Food Safety, Quality and Security |
| AGRI 220 | Plants in the Landscape |
| AGRI 226 | Turfgrass Production |
| AGRI 237 | Introduction to the Health and Nutrition Farm Animals |
| AGRI 238 | Equine Production and Management |
| AGRI 239 | Management and Production of Beef, Sheep and Goats |
| AGRI 247* | Enterprise Project: Part I |
| AGRI 248* | Enterprise Project: Part II |
| AGRI 254 | Ruminant Animal Health |
| AGRI 256 | Management and Production of Poultry and Swine |
| GEOG 101 | Weather and Climate |
| GEOG 103 | The Physical Environment |
| GEOG 201 | Introduction to Climatology |
| GEOG 202 | Geomorphology |
| GEOG 219 | Biogeography |
| GEOG 251 | Cartography I |
| GEOG 252(GEOG 352) | Explanation in Geography: Quantitative Methods |
| GEOG 253 | Introduction to Geographic Information Systems |

300-400 Agrology Courses

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| AGRI 306(was AGRI 206) | Field Techniques in Pest Management |
| AGRI 311(was AGRI 211) | Sustainable Soil Management |
| AGRI 321(was AGRI 222) | Vegetable Crop Production: Science and Practice |
| AGRI 323(was AGRI 223) | Fruit Crop Production: Science and Practice |
| AGRI 324(was AGRI 224) | Greenhouse Production: Science and Practice |
| AGRI 327(was AGRI 227) | Nursery Production and Propagation: Science and Practice |
| AGRI 328 | Forage Crop Production: Science and Practice |
| AGRI 331 | Dairy Production and Management: Science and Practice |
| AGRI 371(was AGRI 230) | Sustainable Holistic Agriculture: Planning and Practices |
| AGRI 390 * | Directed Studies in Agriculture |

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| AGRI 490 * | Directed Studies in Agriculture |
| BIO 307 | Anatomy and Diversity of Plants |
| BIO 308 | Plant Physiology |
| BIO 310 | Conservation Biology |
| BIO 312 | Developmental Biology |
| BIO 319 (GEOG 319) | Swamps and Bogs |
| BIO 330 | Plants and Animals of British Columbia |
| BIO 335 (GEOG 335) | Methods of Freshwater Ecology |
| BIO 357 (GEOG 357) | Conservation GIS |
| BIO 360 | Insect Biology |
| BIO 370 | Introduction to Mycology |
| BIO 390 | Animal Behaviour |
| BIO 401 | Molecular Biology |
| BIO 406 | Advanced Genetics |
| BIO 407 | Applied Biotechnology |
| BIO 409* | Directed Studies in Biology |
| BIO 410 (GEOG 410) | Plant Ecology |
| BIO 414 | Genomics |
| BIO 420* | Special Topics in Biology |
| BIO 421* | Special Topics in Applied Biology |
| BIO 426 | Environmental Microbiology |
| BIO 430 | Forest Ecology |
| BIO 499A* | Directed Studies in Honours Biology I |
| ECON 361 (GEOG 361) | Environmental Economics |
| GEOG 300* | Special Topics in Geography |
| GEOG 302 | River Geomorphology or Advanced Geomorphology |
| GEOG 303 | Environmental Hydrology |
| GEOG 308 | Climate Change and Variability |
| GEOG 311 | Global Resources and the Environment or Environment and Resources |
| GEOG 315 | Soilsclapes OR Soil Process and Function |
| GEOG 318 | Water Resources Management |
| GEOG 319 (BIO 319) | Swamps and Bogs |
| GEOG 331 | Environmental Assessment and Management |
| GEOG 335 (BIO 335) | (Methods in) Freshwater Ecology |
| GEOG 352 (GEOG 252) | Quantitative Methods in Geography |
| GEOG 353 | GIS Applications |
| GEOG 357 (BIO 357) | Conservation GIS |
| GEOG 361 (ECON 361) | Environmental Economics |
| GEOG 400* | Advanced Topics in Geography |
| GEOG 402 | Quaternary Geology & Geomorphology |
| GEOG 410 (BIO 410) | Plant Ecology |
| GEOG 417 | Wetland Biogeography |
| GEOG 419 | Paleoecology |
| GEOG 452* (GEOG 470) | Advanced Field Methods and Techniques (Physical Geography only) |
| GEOG 453 | Remote Sensing of the Environment |
| GEOG 454 | Geographic Data Analysis Modelling |

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| GEOG 457* | Advanced Field Studies in Geography (Physical Geography only) |
| GEOG 458* | GIS Project |
| GEOG 470* (GEOG 452) | Advanced Field Studies in Geography (Physical Geography only) |
| GEOG 484* | Directed Studies |
| GEOG 493* | Research Project |

Foundational Natural Science Courses

| Course ID | Title |
|-------------------|--|
| AGRI 111 | Introduction to Soils |
| BIO 111 | Introductory Biology I |
| BIO 112 | Introductory Biology II |
| BIO 201 | Cell Biochemistry/Metabolism (was Cell Biology I) |
| BIO 202 | Cell Signaling/Gene Regulation (was Cell Biology II) |
| BIO 203 (BIO 309) | Microbiology I |
| BIO 210 | Introduction to Ecology |
| BIO 220 | Genetics |
| BIO 309 (BIO 203) | Microbiology I |
| CHEM 110 | Introductory Chemistry |
| CHEM 113 | Principles of Chemistry I |
| CHEM 114 | Principles of Chemistry II |
| CHEM 213 | Organic Chemistry I |
| CHEM 221 | Inorganic Chemistry |
| GEOG 102 | Evolution of Earth's Surface |
| GEOG 116 | Earth Rocks |
| GEOG 211 | Environmental Science |
| PHYS 101 | Introductory General Physics: Mechanics and Fluids |
| PHYS 105 | Heat, Waves and Optics |
| PHYS 111 | Mechanics |
| PHYS 112 | Electricity and Magnetism |

Mathematics, Calculus & Statistics Courses

| Course ID | Title |
|---------------------|--|
| BIO 420 | Advanced Biostatistics |
| MATH 104 (STAT 104) | Introductory Statistics |
| MATH 111 | Calculus I |
| MATH 112 | Calculus II |
| MATH 118 | Calculus II for Life Sciences |
| MATH 270 (STAT 270) | Introduction to Probability and Statistics |
| STAT 104 (MATH 104) | Introductory Statistics |
| STAT 106 | Statistics I |
| STAT 270 (MATH 270) | Introduction to Probability and Statistics |
| STAT 271 | Introduction to Data Analysis and Statistical Modeling |

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| STAT 307 | Data Visualization |
| STAT 315 | Applied Regression Analysis |
| STAT 330 | Designs of Experiments |
| STAT 350 | Survey Sampling |

Economics, Communications/Writing Courses

| Course ID | Title |
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| AGRI 142 | Agribusiness Principles (computer science type course) |
| AGRI 292 | Leadership and Professional Experience in Agrology |
| CMNS 125 | Communicating Professionally to Academic and Workplace Audiences |
| CMNS 180 | Introduction to Intercultural Communication |
| CMNS 235 | Public Speaking |
| CMNS 251 | Professional Report Writing |
| CMNS 257 (GEOG 257) | Environment: Science and Communication |
| CMNS 325 | Writing for the Sciences and Technologies |
| ECON 100 | Principles of Microeconomics |
| ECON 101 | Principles of Macroeconomics |
| ENGL 105 | Academic Writing |
| GEOG 257 (CMNS 257) | Environment: Science and Communications |
| MACS 130 | Introduction to Digital Media and Communications |