

UBC-Okanagan Approved Course List for Registration with the Agrology Profession in British Columbia

*List includes courses from Earth and Environmental Sciences, Biology, Geography, Ecology
and Evolutionary Biology 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
- biochemistry
- hydrology
- genetics
- chemistry
- earth sciences
- physical geography
- physics
- ecology

- microbiology
- geology

**May include courses that are of benefit to
the study of natural sciences or agrology:**

- math
- statistics
- computer science
- economics
- 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.*

*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
BIOL 204	Vertebrate Structure and Function
BIOL 205	Comparative Invertebrate Zoology
BIOL 209	Fungi (Algae, Fungi and Bryophytes)
BIOL 210	Land Plants (Vascular Plants)
BIOL 250	Evolutionary Biology
EESC 112	Environmental Earth Science
EESC 204	Geochemistry
EESC 205 (GEOG 205)	Introduction to Hydrology
EESC 206	Soil Science
EESC 212 (GEOG 200)	Atmospheric Environments
EESC 213	Introductory Forest Science and Management
EESC 222 (GEOG 222)	Geomorphology
FDSY 221 (GEOG 221)	Food Systems 1: System Thinking
GEOG 108	Earth Systems: Weather, Climate and Life
GEOG 109	Earth Systems: Landscape Dynamics
GEOG 200 (EESC 212)	Atmospheric Environments
GEOG 205 (EESC 205)	Introduction to Hydrology
GEOG 207	Introduction to Biogeography
GEOG 221 (FDSY 221)	Food Systems 1: System Thinking
GEOG 222 (EESC 222)	Geomorphology
GEOG 272	Cartography and Remote Sensing

300-400+ Agrology Courses

Course ID	Title
BIOC 307	Wine Biochemistry (Enology 1)
BIOC 310	Plant Biochemistry
BIOL 306	Ecology of Animals
BIOL 307	Limnology
BIOL 308	Population Biology
BIOL 309	Field Ecology of Plants and Soil
BIOL 314	Medical Microbiology
BIOL 330	Freshwater Microbiology
BIOL 341	Neurobiology
BIOL 354	Cell Physiology
BIOL 356	Comparative Animal Physiology
BIOL 357	Introduction to Entomology
BIOL 358	Plant Ecophysiology
BIOL 363	Developmental Biology
BIOL 364	Evolutionary Development
BIOL 366	Molecular Genetics
BIOL 371	Flora of British Columbia
BIOL 372	Field Ornithology

BIOL 375 (FWSC 375)	Flora and Fauna of Inland Waters
BIOL 380	Food and Industrial Microbiology
BIOL 381	Environmental Microbiology
BIOL 401	Spatial Ecology
BIOL 410	Plant-Microbe Interactions
BIOL 414*	Advanced Field Ecology
BIOL 420*	Special Topics in Biology
BIOL 422	Conservation Biology
BIOL 430*	Special Topics in Biology
BIOL 440*	Honours Thesis
BIOL 444 (EESC 444(EESC 544)	Dynamic Modelling of Human-Environment Systems
BIOL 452 *	Directed Studies in Biology
BIOL 459	Behavioural Ecology
BIOL 460	Population Genetics
BIOL 467	Comparative Environmental Physiology
BIOL 468	Molecular Approaches in Ecology and Evolution
BIOL 480	Mycology
BIOL 503 *	Integrated Approaches to Scientific Problems
BIOL 510	Plant–Microbe Interactions
BIOL 512	Spatial Ecology
BIOL 513	Conservation Biology
BIOL 514 *	Advanced Field Ecology
BIOL 520 *	Special Topics in Biology
BIOL 522 *	Directed Studies in Biology
BIOL 530*	Special Topics in Biology
BIOL 552A*	Directed Studies in Biology
BIOL 560	Population Genetics
BIOL 567	Comparative Environmental Physiology
BIOL 568	Molecular Approaches in Ecology and Evolution
BIOL 599*	MSc Thesis
CHEM 301	Aqueous Environmental Chemistry
CHEM 302	Atmospheric Environmental Chemistry
CHEM 317	Environmental Organic Chemistry
ECON 371	Economics of the Environment
ECON 372	Natural Resource Economics
EESC 301	Limnology
EESC 303	Oceanography
EESC 304 (GEOG 304)	Anthropogenic Climate Change
EESC 305	Land Use Hydrology
EESC 309	Global Biogeochemistry
EESC 312	Forest Science and Management
EESC 313	Management of Forested Watersheds
EESC 314	Environmental Impact Assessment: Process, Regulation and Admin
EESC 315	Environmental Impact Assessment: Techniques and Practice
EESC 323	Geochemistry

EESC 333	Analytical Geochemistry
EESC 335 + EESC 356	Field Techniques + Stratigraphy and Sedimentology (combined - 1 agrology course)
EESC 342	Hydrogeology
EESC 356 + EESC 335	Stratigraphy and Sedimentology + Field Techniques (combined - 1 agrology course)
EESC 380 (GISC 380)	Fundamentals of Geographic Information Science I
EESC 381 (GISC 381)	Fundamentals of Geographic Information Science II
EESC 395*	Special Topics in Earth and Environmental Sciences
EESC 402	Freshwater Resources
EESC 413	Analytical Methods in Hydrology
EESC 418*	Special Topics in Earth and Environmental Science
EESC 419*	Special Topics in Earth and Environmental Science
EESC 422 (GEOG 422)	Fluvial Geomorphology
EESC 423	Tracers of Natural Processes
EESC 429	Contaminant Hydrogeology
EESC 431	Quaternary Glacial Environments
EESC 435	Fluvial Field Techniques
EESC 437 (GEOG 437)	Terrain Analysis
EESC 444 (EESC 544) (BIOL 444)	Dynamic Modelling of Human-Environment Systems
EESC 447*	Directed Studies in Earth and Environmental Sciences
EESC 448 *	Directed Studies in Earth and Environmental Sciences
EESC 449 *	Honours Thesis
EESC 456 (GEOG 466)	Soil Science
EESC 495*	Advanced Special Topics in Earth and Environmental Science
EESC 502	Environmetrics
EESC 512	Applied Data Analysis in Geosciences
EESC 540*	Directed Readings in Earth and Environmental Sciences
EESC 544 (EESC 444) (BIOL 444)	Dynamic Modelling of Human-Environment Systems
EESC 550*	Research Seminar in Earth and Environmental Science
EESC 551 *	Special Topics in Earth and Environmental Sciences
EESC 599*	Master's Thesis
FWSC 375 (BIOL 375)	Flora and Fauna of Inland Waters
GEOG 301	Mechanisms of Global Change
GEOG 304 (EESC 304)	Anthropogenic Climate Change
GEOG 307	Advanced Biogeography
GEOG 314	Environmental Impact Assessment: Process, Regulation and Admin
GEOG 317	The Physical Environment of BC
GEOG 370	Introduction to Geographic Information Science
GEOG 380 (GISC 380)	Fundamentals of Geographic Information Science I
GEOG 381 (GISC 381)	Fundamentals of Geographic Information Science II
GEOG 414	Applied Climatology
GEOG 421	Geography of Food Systems
GEOG 422 (EESC 422)	Fluvial Geomorphology
GEOG 435	Wine Geographies
GEOG 437 (EESC 437)	Terrain Analysis

GEOG 466 (EESC 456)	Soil Science
GEOG 491*	Selected Topics in Geography
GEOG 498 *	Directed Studies in Geography
GISC 380 (GEOG 380)	Fundamentals of Geographic Information Science I
GISC 381 (GEOG 381)	Fundamentals of Geographic Information Science II
GISC 480	Practical Applications in GIS

Foundational Natural Science Courses – for Section 1 in the BCIA Academic Worksheet

Course ID	Title
BIOL 116	Biology for Science Majors I
BIOL 125	Biology for Science Majors II
BIOL 200	Cell Biology
BIOL 201	Introduction to Evolution and Ecology
BIOL 228	Introductory Microbiology
BIOL 203	Introduction to Ecology
BIOL 265	Principles of Genetics
BIOL 311	Biochemistry I
BIOL 319	Biochemistry II
CHEM 111	Principles of Chemistry I
CHEM 113	Principles of Chemistry II
CHEM 121	Structural Chemistry
CHEM 123	Physical and Organic Chemistry
CHEM 201	Introduction to Physical Chemistry
CHEM 203	Introduction to Organic Chemistry
CHEM 204	Organic Chemistry
CHEM 211	Analytical Chemistry
CHEM 213	Organic Chemistry for Biological Sciences I
CHEM 214	Organic Chemistry for Biological Sciences II
CHEM 220	Atomic Structure and Molecular Bonding
CHEM 311	Instrumental Analytical Chemistry
EESC 101	Environmental Science
EESC 111	Earth Science
EESC 121	Earth History
EESC 200	Mineralogy
INDG 307	Traditional Ecological Knowledge
INDG 420	Indigenous Perspectives on Food, Place, Identity, and Biodiversity
PHYS 102	Electricity, Light, and Radiation
PHYS 111	Introductory Physics for the Physical Sciences I
PHYS 112	Introductory Physics for the Life Sciences I
PHYS 121	Introductory Physics for the Physical Sciences II
PHYS 122	Introductory Physics for the Life Sciences II

Mathematics/Calculus, Statistics Courses – for Section 1 in the BCIA Academic Worksheet

Course ID	Title
BIOL 202	Introduction to Biostatistics
DATA 101	Making Predictions with Data
GEOG 271	Geographic Data Analysis
MATH 100	Differential Calculus with Applications to Physical Sciences and Engineering
MATH 101	Integral Calculus with Applications to Physical Sciences and Engineering
MATH 103	Integral Calculus with Applications to Life Sciences
MATH 200	Calculus III
STAT 121	Elementary Statistics
STAT 230	Introductory Statistics

Economics, Communications/Writing Courses – for Section 1 in the BCIA Academic Worksheet

Course ID	Title
BIO 313	Science Writing
ECON 101	Microeconomics
ECON 102	Macroeconomics
EESC 398	Technical Communication
ENGL 112	Strategies for University Writing