

### University of Northern BC (UNBC) Approved Course List for Registration

#### with the Agrology Profession in British Columbia

List includes courses from the Department in Biology, Geography, Environmental Science, Forest Ecology and Management, Outdoor Recreation and Conservation, and Wildlife and Fisheries.

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 <u>foundational</u> 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 <u>and cannot double count in the other two sections of the worksheet</u>.

#### 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 202	Invertebrate Zoology
BIOL 204	Plant Biology
ENSC 201	Weather and Climate
ENSC 202 (ENVS 202)	Introduction to Aquatic Systems
ENVS 201	Introduction to Atmospheric Science
FSTY 201	Forest Plant Systems
FSTY 205	Forest Soils
FSTY 206	Forest Biology
FSTY 207	Terrestrial Ecological Classification
FSTY 208	Silvics
FSTY 209	Forest Biology and Silvics
GEOG 204	Introduction to GIS
GEOG 205	Cartography and Geomatics
GEOG 210	Geomorphology
NREM 100	Field Skills
NREM 203	Resource Inventories and Measurements
NREM 204	Introduction to Wildlife and Fisheries
NREM 210	Integrated Resource Management

#### 300-400 Agrology Courses

Course ID	Title
BIOL 301	Systematic Botany
BIOL 302	Limnology
BIOL 303	Plant Physiology
BIOL 304	Plants, Society and the Environment
BIOL 307	Ichthyology and Herpetology
BIOL 308	Ornithology and Mammalogy
BIOL 311	Cell and Molecular Biology
BIOL 315	Animal Diseases and Parasites
BIOL 318	Fungi and Lichens
BIOL 321	Animal Physiology
BIOL 322	Entomology
BIOL 323	Evolutionary Biology
BIOL 325	Ecological Analysis
BIOL 402	Aquatic Plants
BIOL 404	Plant Ecology
BIOL 406	Fish Ecology
BIOL 409	Conservation of Aquatic Ecosystems
BIOL 410	Population and Community Biology
BIOL 411	Conservation Biology
BIOL 412	Wildlife Ecology
BIOL 413	Wildlife Management

BIOL 414	Fisheries Management
BIOL 420	Animal Behaviour
CHEM 302	Environmental Chemistry I
ENGR 451 (ENSC 451) ENPL 305 (ENVS 305)	Groundwater Hydrology Environmental Impact Assessment
ENPL 401	Environmental Law
ENPL 402	Terrain Assessment
ENSC 307	Intro to Geochemistry
ENSC 308 (ENVS 308)	Northern Contaminated Environments
ENSC 312 (ENVS 312)	Biometeorology
ENSC 325	Soil Physics Processes & Environment
ENSC 402	Weather and Climate
ENSC 404	Waste Management
ENSC 406 (ENVS 406)	Environmental Modelling
ENSC 412	Air Pollution
ENSC 418	Environmental Measurement and Analysis
ENSC 425 (ENSC 625)	Climate Change and Global Warming
ENSC 430* (NRES 430)	Undergrad Thesis
ENSC 435	Soil Biological Processes and the Environment
ENSC 450	Environmental and Geophysical Data Analysis
ENSC 451 (ENSC 651)	Groundwater Hydrology
ENSC 452	Reclamation and Remediation of Disturbed Environments
ENSC 625 (ENSC 425)	Climate Change & Global Warming
ENSC 651 (ENSC 451)	Groundwater Hydrology
FSTY 305	Silviculture
FSTY 307	Disturbance Ecology and Forest Health
FSTY 309	Fire Ecology and Management
FSTY 309 FSTY 310	Fire Ecology and Management Forest Economics
	Forest Economics
FSTY 310	
FSTY 310 FSTY 405 FSTY 415	Forest Economics Forest Ecosystem Modelling Forest Soils
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625)	Forest Economics Forest Ecosystem Modelling Forest Soils Soil Formation and Classification
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625) GEOG 300	Forest Economics Forest Ecosystem Modelling Forest Soils Soil Formation and Classification Geographic Information Systems
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625) GEOG 300 GEOG 310	Forest Economics Forest Ecosystem Modelling Forest Soils Soil Formation and Classification Geographic Information Systems Hydrology
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625) GEOG 300 GEOG 310 GEOG 311	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin Geomorphology
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625) GEOG 300 GEOG 310 GEOG 311 GEOG 312	Forest Economics   Forest Ecosystem Modelling   Forest Soils   Soil Formation and Classification   Geographic Information Systems   Hydrology   Drainage Basin Geomorphology   Geomorphology of Cold Regions
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625) GEOG 300 GEOG 310 GEOG 311 GEOG 312 GEOG 320	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentology
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625) GEOG 300 GEOG 310 GEOG 311 GEOG 312 GEOG 320 GEOG 357	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentologyIntro to Remote Sensing
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625) GEOG 300 GEOG 310 GEOG 311 GEOG 312 GEOG 320 GEOG 357 GEOG 401*	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentologyIntro to Remote SensingTenure, Conflict, and Resource Geography
FSTY 310 FSTY 405 FSTY 415 FSTY 425 (NREM 625) GEOG 300 GEOG 310 GEOG 311 GEOG 312 GEOG 320 GEOG 320 GEOG 357 GEOG 401* GEOG 405	Forest Economics Forest Ecosystem Modelling Forest Soils Soil Formation and Classification Geographic Information Systems Hydrology Drainage Basin Geomorphology Geomorphology of Cold Regions Sedimentology Intro to Remote Sensing Tenure, Conflict, and Resource Geography Fluvial Geomorphology
FSTY 310   FSTY 405   FSTY 415   FSTY 425 (NREM 625)   GEOG 300   GEOG 310   GEOG 311   GEOG 312   GEOG 357   GEOG 401*   GEOG 411	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentologyIntro to Remote SensingTenure, Conflict, and Resource GeographyFluvial GeomorphologyQuarternary and Surficial Geology
FSTY 310   FSTY 405   FSTY 415   FSTY 425 (NREM 625)   GEOG 300   GEOG 310   GEOG 312   GEOG 320   GEOG 357   GEOG 401*   GEOG 411   GEOG 413	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentologyIntro to Remote SensingTenure, Conflict, and Resource GeographyFluvial GeomorphologyQuarternary and Surficial GeologyAdvanced GIS
FSTY 310   FSTY 405   FSTY 415   FSTY 425 (NREM 625)   GEOG 300   GEOG 310   GEOG 311   GEOG 312   GEOG 320   GEOG 357   GEOG 401*   GEOG 411   GEOG 413   GEOG 414	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentologyIntro to Remote SensingTenure, Conflict, and Resource GeographyFluvial GeomorphologyQuarternary and Surficial GeologyAdvanced GISWeathering Processes
FSTY 310   FSTY 405   FSTY 415   FSTY 425 (NREM 625)   GEOG 300   GEOG 310   GEOG 311   GEOG 312   GEOG 357   GEOG 401*   GEOG 411   GEOG 413   GEOG 432	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentologyIntro to Remote SensingTenure, Conflict, and Resource GeographyFluvial GeomorphologyQuarternary and Surficial GeologyAdvanced GISWeathering ProcessesRemote Sensing
FSTY 310   FSTY 405   FSTY 415   FSTY 425 (NREM 625)   GEOG 300   GEOG 310   GEOG 312   GEOG 320   GEOG 357   GEOG 401*   GEOG 411   GEOG 413   GEOG 432   GEOG 457	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentologyIntro to Remote SensingTenure, Conflict, and Resource GeographyFluvial GeomorphologyQuarternary and Surficial GeologyAdvanced GISWeathering ProcessesRemote SensingAdvanced Remote Sensing
FSTY 310   FSTY 405   FSTY 415   FSTY 425 (NREM 625)   GEOG 300   GEOG 310   GEOG 311   GEOG 312   GEOG 357   GEOG 401*   GEOG 411   GEOG 413   GEOG 432	Forest EconomicsForest Ecosystem ModellingForest SoilsSoil Formation and ClassificationGeographic Information SystemsHydrologyDrainage Basin GeomorphologyGeomorphology of Cold RegionsSedimentologyIntro to Remote SensingTenure, Conflict, and Resource GeographyFluvial GeomorphologyQuarternary and Surficial GeologyAdvanced GISWeathering ProcessesRemote Sensing

NREM 333*	Field Applications in Resource Management
NREM 400	Natural Resources Planning
NREM 410	Watershed Management
NREM 413 (NREM 613)	Agroforestry
NREM 425 (FSTY 625)	Soil Formation and Classification
NREM 601	Plant Community Ecology
NREM 613 (NREM 413)	Agroforestry
NREM 625 (FRTY 425)	Soil Formation and Classification
NREM 720	Research Thesis
NREM 799	Plant Physiology
NRES 422*	Undergraduate Report
NRES 430* (ENSC 430)	Undergrad Thesis
NRES 498*	Special Topics in Natural Resources and Environmental Studies
NRES 712	Spatial and Temporal Analyses
NRES 776	Advanced Stat Analyses for NRSci
NRES 801	Integrated Environmental Systems I

### Foundational Natural Science Courses

Course ID	Title
BIOL 101	Introductory Biology I
BIOL 102	Introductory Biology II
BIOL 103	Introductory Biology I
BIOL 104	Introductory Biology II
BIOL 110	Introductory Ecology
BIOL 201	Ecology
BIOL 203	Microbiology
BIOL 210	Genetics
CHEM 100	General Chemistry I
CHEM 101	General Chemistry II
CHEM 200	Physical Chemistry I
CHEM 201	Organic Chemistry I
CHEM 202	Inorganic Chemistry I
CHEM 203	Organic Chemistry II
CHEM 204	Introductory Biochemistry
CHEM 220	Organic and Biochemistry
PHYS 100	Introduction to Physics
PHYS 101	Introduction to Physics I
PHYS 110	Introductory Physics I: Mechanics
PHYS 111	Introductory Physics II: Waves and Electricity
PHYS 115	General Introduction to Physics

#### Mathematics, Calculus & Statistics Courses

Course ID litle	Course ID	Title
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ECON 205	Statistics for Business and the Social Science
MATH 152	Calculus for Non-majors
MATH 100	Calculus I
MATH 101	Calculus II
MATH 200	Calculus III
STAT 240	Basic Statistics
STAT 371	Probability and Statistics for Scientists and Engineers

## Economics, Communications/Writing Courses

Course ID	Title
ECON 100	Microeconomics
ENGL 170	Writing and Communication Skills
NRES 100	Communications in Natural Sciences and Environmental Studies