

# University of Calgary Approved Course List for Registration with the Agrology Profession in Alberta

To be eligible to be registered as an Agrologist in Training (AIT) leading to the Professional Agrologist (PAg) designation, applicants must have obtained a 4-year 120-credit baccalaureate degree in agriculture or environmental science from a post-secondary institution recognized by AIA Council. This degree must meet the following course requirements:

1. Total agrology (introductory + senior agrology) coursework must be a minimum of 60 credits with a minimum of 24 of these credits at the senior course (third or fourth year) level.
2. Foundational natural science coursework must be a minimum of 15 credits. Courses must be foundational to the agrology profession
3. Mathematics OR calculus OR statistics coursework must be a minimum of 3 credits.
4. English OR communications coursework must be a minimum of 3 credits.
5. Economics coursework must be a minimum of 3 credits.

University of Calgary Courses that are considered eligible for meeting the above coursework requirements are listed below in the following categories: Introductory Agrology, Senior Agrology, Foundational Natural Sciences, Mathematics, Calculus or Statistics, English or Communications, Economics.

Please note courses may be accepted by the Registration Committee on a case by case basis depending on the type of degree and potential practice areas.

## Introductory Agrology Courses

*Introductory + Senior Agrology coursework must total a minimum of 60 credits*

*\*Some courses have been renamed or discontinued for 2014 at the University of Calgary*

*\*Requires supporting documentation*

Course ID	Title
BIOL 241	Energy Flow in Biological Systems
BIOL 309*	(BOT 309) Plants and People
BIOL 375	Insects, Science and Society
BIOL 453	Plants in Their Environment
CHEM 321	Environmental Chemistry
GEOG 211	The Physical Environment



GEOG 231	Introduction to Geospatial Methods
GEOG 305	Weather and Climate
GEOG 307	Landform Processes and Morphology
GEOG 313	Soils and Vegetation
GEOG 321	Environmental Geography
GEOG 333	Remote Sensing 1
GOEG 339	Analytical Methods in Geography 1
GEOG 357	Geographical Information Systems 1
GEOG 323*	Geochemical Processes
GEOG 373*	Surficial Geology
GEOG 391	Geographical Field Studies

### **Senior Agrology Courses**

***(Minimum of 24 credits from the list)***

<b>Course ID</b>	<b>Title</b>
BIOL 435	Biology of Fungi
BIOL 431	Conservation Biology
BIOL 591	Insect Biodiversity
BSEN 561	Ethical Issues and the Professional Manager
ECOL 413	Field Course in Ecology
ECOL 417	Aquatic Communities and Ecosystems
ECOL 419	Terrestrial Communities and Ecosystems
ECOL 429	Ecology of Individuals
ECOL 439	Ecology of Populations
ECOL 491*	Ecological Entomology
ENSC 401	Environmental Science Field Course I
ENSC 501	Environmental Science Field Course 2
ENSC 502*	Special Problems in Environmental
ENSC 503	Environmental Assessment and Hearings
GEOG 411	Fluvial Geomorphology
GEOG 413	Soil Characteristics and Formation
GEOG 417	Biogeography and Natural Ecosystems
GEOG 433	Remote Sensing II
GEOG 437	Applied Mapping Techniques
GEOG 439	Analytical Mapping Techniques
GEOG 457	Geographic Information Systems II
GEOG 507	Glacial Geomorphic Systems
GOEG 509	Permafrost
GEOG 516	Ecohydrology
GEOG517	Conservation GIS
GEOG 519	Landscape Ecology
GEOG 521*	Environmental Sustainability and Management



GEOG 522	Topics in Politics of the Environment
GEOG 537	Field Studies in GIS and Natural Resource Management
GEOG 567	Introduction to Programming in Geographic Information Systems
GEOL 441	Field Techniques in Hydrogeology
GEOL 403	Aqueous Geochemistry
GEOL 505	Contaminant Hydrogeology
GEOL 507*	Geostatistics
PLBI 401*	(BOT 401) Plant Biotechnology
PLBI 403*	(BOT 303) Plant Physiology
PLBI 421*	(BOT 321) Plant Anatomy
PLBI 541*	(BOT 541) Taxonomy of the Seed Plants
PLBI 543	Plant Cell and Developmental Biology

### **\*Zoology Courses\***

*Zoology courses may be accepted by the Registration Committee on a case by case basis depending on the type of degree and potential practice areas. These practice areas can include livestock production and management, wildlife management, and some areas in conservation.*

### **Foundational Natural Sciences**

*(Minimum 15 credits from the list)*

Course ID	Type
BCEM***	Any Biochemistry course foundational to Agrology
BIOL***	Any Biology course not listed under Introductory or Senior Agrology and foundational to Agrology
CHEM***	Any Chemistry course not listed under Introductory of Senior Agrology and foundational to Agrology
CHEM 521	Introduction to Atmospheric Chemistry
GEOG 405*	Applied Climatology
GEOG 415	Hydrogeology
GEOG 503	Climate Change
GEOL 201	(Principles of Geology and Geophysics I) Principles of Geoscience I
GEOL 202	(GEOG 203) Principles of Geoscience II
GEOL 353	Surficial Systems and Change
GEOL 401	Physical Hydrogeology
PHYS***	Any Physics courses foundational to Agrology

### **Mathematics or Statistics Courses**

*(Minimum of 3 credits selected from the list)*

Course ID	Title
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MATH***	Any math course in linear algebra or calculus
STAT ***	Any statistics course
BIOL 315	Quantitative Biology I
ECOL 425	Quantitative Biology II
STATS 327	Statistics of the Physical and Environmental Sciences

### **Communication or Equivalent Courses**

*(Minimum of 3 credits selected from the list)*

Course ID	Title
COMS***	Any Communication course

### **Economics Courses**

*(Minimum of 3 credits selected from the list)*

Course ID	Title
ECON 101	Principles of Microeconomics
ECON 203	Principles of Macroeconomics