

# University of Lethbridge 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 Lethbridge 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 Lethbridge*

Course ID	Title
AGST 1000	The Evolution of Agriculture
ECON 2150	Economics of Agricultural Issues
ECON 2350	Economics of Agricultural Markets I
ENVS 2000	Fundamentals of Environmental Science
GEOG 1000	Introduction to Physical Geography
GEOG 1010*	Introduction to Geography
GEOG 2030	Geomorphology



GEOG 2090	Biogeography
GEOG 2700	Geographical Data and Analysis
GEOG 2735	Introduction to Geographical Information Science
GEOG 3080	Soils
GEOG 3720	Remote Sensing
GEOG 3740	Geographical Information Systems

### **Senior Agrology Courses**

*(Minimum of 24 credits from the list)*

<b>Course ID</b>	<b>Title</b>
AGST 3300	Modelling of Agricultural Systems
AGST 4300	Advanced Modelling of Agricultural Systems
BIOL 3505	Freshwater Biology
BIOL 3605	Conservation Biology
BIOL 3610	Prairie Conservation
BIOL 3630	Field Biology
BIOL 3460	Plant Physiology
BIOL 3700	Ecosystem and community Ecology
BIOL 3800	Aquatic Ecosystems
BIOL 4100	Advances in Agricultural Biotechnology
BIOL 4170	Plant Biotechnology
BIOL 4440	Toxicology
ECON 3300	Agricultural Biotechnology
ECON 3350	Economics of Agricultural Markets II
ECON 3210	Natural Resource Economics
ECON 3220	Environmental Economics
ECON 4300	Agricultural Policy II
GEOG 3035	Fluvial Geomorphology
GEOG 3060	Glaciology and Glacial Geomorphology
GEOG 3075	Environmental Resources Management
GEOG 3210	Agricultural Geography
GEOG 3235	Quantitative models for Geographic Analysis
GEOG 3710	Field Techniques in the Earth Science
GEOG 4060	Agricultural Soil Management
GEOG 4065	Irrigation Science
GEOG 4415	Integrated Watershed Management
GEOG 4725	Advanced Remote Sensing
GEOG 4730	Spatial Statistics
GEOG 4740	Advanced Geographical Information Systems
MGT 4580	Environmental Management



STAT 3700	Design and Analysis of Experiments
-----------	------------------------------------

***Additional information required for acceptance of ENVS 3000/ENVS 4000 such as a course syllabus***

**\*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	Title
BCHM***	Any Biochemistry Course Foundational to Agrology
BIOL ****	Any Biology course not listed under Senior Agrology and foundational to Agrology
BIOL 3300	Principles of Ecology
CHEM 1000	General Chemistry I
CHEM 1110	Chemistry for Life Sciences I
CHEM 2000	General Chemistry II
CHEM 2120	Chemistry for Life Sciences II
CHEM 2410	Analytical Chemistry II
CEHM 2500	Organic Chemistry I
CHEM 2600	Organic Chemistry II
CHEM 2740	Physical Chemistry
CHEM 3730	Advanced Physical Chemistry
CHEM 3830	Inorganic Chemistry I
CHEM 3840	Inorganic Chemistry II
GEOG 2300	Weather and Climate
GEOG 2400	Hydrology I
GEOG 3015*	Microclimatology
GEOG 3300	Microclimatology
GEOG 4400	Hydrology II
GEOL 2060	Physical Geology
PHYS 1000	Introduction to Physics I
PHYS 1050	Introduction to Biophysics
PHYS 2000	Introduction to Physics II
PHYS 2120	Introduction to Physics III
PHYS 2130	Waves, Optics and Sound
PHYS 2150	Quantum Mechanics I



PHYS 3200	Mechanics
PHYS 3150	Quantum Mechanics II
PHYS 3175	Electricity and Magnetism

### **Mathematics or Statistics Courses**

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

Course ID	Title
MATH 1560	Calculus I
MATH 2560	Calculus II
MATH 2570	Calculus III
MATH 2580	Calculus IV
MATH 3410	Linear Algebra
MATH 3600	Differential Equations I
MATH 4600	Differential Equations II
STAT 1770	Introduction to Probability and Statistics
STAT 2780	Statistical Inference
STAT 3500	Mathematical Probability

### **Communication or Equivalent Courses**

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

Course ID	Title
WRIT 1000	Introduction to Academic Writing
WRIT 2000	Writing in the Disciplines Series

### **Economics Courses**

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

Course ID	Title
ECON 1010	Introduction to Microeconomics
ECON 1012	Introduction to Macroeconomics