National Education Entrance Standard vs. Practice Standards



Alberta Institute of Agrologists

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National Standard Course Category	UofL Course (Undergraduate Courses 2022/23)	Knowledge Requirement for a Practice Area				
(credits required)	2022/2023 Program Requirements for B.Sc in Agricultural Studies (Courses in Bold Type Meet the Knowledge Requirement for that Subject in a Practice Standard)	Agricultural Marketing and Sales	Crop Production	Livestock Production	Rangeland and Pasture Management	
Foundational Natural Sciences						
	Biology 1010 - Cellular Basis of Life					
	Biology 1020 - Diversity of Life					
	Biology 2000 - Principles of Genetics			V		
	Biology 2200 - Principles of Ecology					
	Biology 2300 - Cell Biology					
	Chemistry 1110 - Chemistry for Life Sciences I					
	Chemistry 2120 - Chemistry for Life Sciences II					
	Geography 2065 - Physcial Geology					
	Physics 1050 - Introduction to Biophysics					
Senior Agrology	A . C. P. 4000 A L. LAA L P. CA . H. LC .					
(24 credits required)	Agric Studies 4300 - Advanced Modeling of Agricultural Systems					
	Biology 3420 - Animal Physiology			٧		
	Biology 3460 - Plant Physiology		٧			
	Biology 3560 - Integrated Plant Biology					
	Biology 3700 - Ecosystem Ecology					
	Biology 3710 - Populaton Ecology					
	Biology 3720 - Community Ecology					
	Biology 4570 - Plant Breeding and Genetics					
	Geography 3210 - Food Systems Analysis					
	Geography 4060 - Agricultural Soil Management		٧			
	Geography 4065 - Irrigation Science		٧			
	Geography 4400 - Advanced Hydrology					
	Geography 4725 - Advanced Remote Sensing					
	Geography 4740 - Advanced Geographical Information Systems					
Introductory Asystems						
Introductory Agrology						
Intro Agrology + Senior Agrology =	A : C: I: 4000 TI 5 I : CA : II					
60 credits required)	Agric Studies 1000 - The Evolution of Agriculture					
	Agric Studies 3300 - Modeling of Agricultural Systems					
	Environmental Science 2000 - Fundamentals of Environmental Science			٧		
	Geography 2030 - Geomorphology					
	Geography 2300 - Weather and Climate					
	Geography 2700 - Geographical Data and Analysis					
	Geography 2735 - Introduction to Geographical Information Science					
	Geography 3075 - Environmental Resources Management		.,			
	Geography 3000 - Soils		٧	√ √	٧	
	Geography 3720 Pomoto Sonsing			V	ν	
	Geography 3720 - Remote Sensing Geography 3740 - Geographical Information Systems					
	The following courses may or may not be Agrology related:	1				
	Agricultural Studies 2000 unspecified (LC technical term)	-				
	Agricultural Studies 2000 unspecified (LC technical term) Agricultural Studies 2000 unspecified (LC technical term)					
	Agricultural Studies 2000 unspecified (LC technical term) Agricultural Studies 2000 unspecified (LC technical term)	+		1	1	
	Agricultural Studies 2000 unspecified (LC technical term) Agricultural Studies 3000 unspecified (LC technical term)					
	Agricultural Studies 3000 unspecified (LC technical term) Agricultural Studies 3000 unspecified (LC technical term)				<u> </u>	
	Agricultural studies 5000 diispecined (LC technical term)	+			 	
Economics						
Leonomics						

2022-09-23 1 of 2

National Education Entrance Standard vs. Practice Standards



Alberta Institute of Agrologists

National Standard Course Category	UofL Course (Undergraduate Courses 2022/23)	Knowledge Requirement for a Practice Area					
(credits required)	2022/2023 Program Requirements for B.Sc in Agricultural Studies (Courses in Bold Type Meet the Knowledge Requirement for that Subject in a Practice Standard)	Agricultural Marketing and Sales	Crop Production	Livestock Production	Rangeland and Pasture Management		
(3 credits required)	Economics 1010 - Introduction to Microeconomics						
Mathematics or Statistics							
(3 credits required)	Statistics 1770 - Introduction to Probability and Statistics		٧				
	Mathematics 1010 - Introduction to Calculus						
	Mathematics 1560 - Calculus I						
	Mathematics 1565 - Accelerated Calculus I						
Communications							
(3 credits required)	No course identified in Program Requirements for B.Sc Agric Studies						
		The Following Subjects Are Not Listed in the B.Sc Agricultural Studies Program Requirements But Are <u>Also Required</u> to Qualify for the P.Ag in the Following Practice Areas (Each subject must be 3-credit equivalent course)					
		Agricultural Marketing and Sales	Crop Production	Livestock Production	Rangeland and Pasture Management		
		Introductory Communications	Introductory Crop Science	Introductory Animal Science	Plant Identification/Taxonomy		
		At least <u>two</u> of the following:	Introductory Crop Science At least one of the following:	Introductory Animal Science Species-Specific Production Systems	Plant Identification/Taxonomy Invasive Species and Weeds		
		,	, ,	Species-Specific Production			
		At least <u>two</u> of the following:	At least <u>one</u> of the following:	Species-Specific Production Systems	Invasive Species and Weeds		
		At least <u>two</u> of the following: Introductory Crop Science	At least one of the following: Annual Crops	Species-Specific Production Systems Animal Health and Welfare	Invasive Species and Weeds Soil Genesis and Classification		
		At least <u>two</u> of the following: Introductory Crop Science Introductory Animal Science	At least <u>one</u> of the following: Annual Crops Perennial Crops	Species-Specific Production Systems Animal Health and Welfare Introductory Animal Nutrition	Invasive Species and Weeds Soil Genesis and Classification Soil Fertility Range/Pasture Livestock		
		At least <u>two</u> of the following: Introductory Crop Science Introductory Animal Science Introductory Horticulture	At least <u>one</u> of the following: Annual Crops Perennial Crops Horticultural Crops	Species-Specific Production Systems Animal Health and Welfare Introductory Animal Nutrition Feeds and Feeding	Invasive Species and Weeds Soil Genesis and Classification Soil Fertility Range/Pasture Livestock Production		
		At least two of the following: Introductory Crop Science Introductory Animal Science Introductory Horticulture Introductory Agroforestry Industrial Vegetation	At least one of the following: Annual Crops Perennial Crops Horticultural Crops Agroforestry	Species-Specific Production Systems Animal Health and Welfare Introductory Animal Nutrition Feeds and Feeding Advanced Genetics/Genomics	Invasive Species and Weeds Soil Genesis and Classification Soil Fertility Range/Pasture Livestock Production Wildlife Ecology and Habitat		
		At least two of the following: Introductory Crop Science Introductory Animal Science Introductory Horticulture Introductory Agroforestry Industrial Vegetation Management	At least one of the following: Annual Crops Perennial Crops Horticultural Crops Agroforestry Soil Fertility Irrigated or Dryland Crop Water	Species-Specific Production Systems Animal Health and Welfare Introductory Animal Nutrition Feeds and Feeding Advanced Genetics/Genomics Reproductive Physiology	Invasive Species and Weeds Soil Genesis and Classification Soil Fertility Range/Pasture Livestock Production Wildlife Ecology and Habitat Soil Water Management Forage and Pasture		
		At least two of the following: Introductory Crop Science Introductory Animal Science Introductory Horticulture Introductory Agroforestry Industrial Vegetation Management Agricultural Machinery	At least one of the following: Annual Crops Perennial Crops Horticultural Crops Agroforestry Soil Fertility Irrigated or Dryland Crop Water Use	Species-Specific Production Systems Animal Health and Welfare Introductory Animal Nutrition Feeds and Feeding Advanced Genetics/Genomics Reproductive Physiology Animal Diseases	Invasive Species and Weeds Soil Genesis and Classification Soil Fertility Range/Pasture Livestock Production Wildlife Ecology and Habitat Soil Water Management Forage and Pasture Management		
		At least two of the following: Introductory Crop Science Introductory Animal Science Introductory Horticulture Introductory Agroforestry Industrial Vegetation Management Agricultural Machinery Land Management Technologies	At least one of the following: Annual Crops Perennial Crops Horticultural Crops Agroforestry Soil Fertility Irrigated or Dryland Crop Water Use At least one of the following: Weed Science Agricultural Entomology	Species-Specific Production Systems Animal Health and Welfare Introductory Animal Nutrition Feeds and Feeding Advanced Genetics/Genomics Reproductive Physiology Animal Diseases Animal Housing Introductory Agricutlural Economics Animal and Animal Products Marketing	Invasive Species and Weeds Soil Genesis and Classification Soil Fertility Range/Pasture Livestock Production Wildlife Ecology and Habitat Soil Water Management Forage and Pasture Management Rangeland Management		
		At least two of the following: Introductory Crop Science Introductory Animal Science Introductory Horticulture Introductory Agroforestry Industrial Vegetation Management Agricultural Machinery Land Management Technologies Introductory Marketing Introductory Agricultural	At least one of the following: Annual Crops Perennial Crops Horticultural Crops Agroforestry Soil Fertility Irrigated or Dryland Crop Water Use At least one of the following: Weed Science Agricultural Entomology Plant Pathology	Species-Specific Production Systems Animal Health and Welfare Introductory Animal Nutrition Feeds and Feeding Advanced Genetics/Genomics Reproductive Physiology Animal Diseases Animal Housing Introductory Agricutlural Economics Animal and Animal Products	Invasive Species and Weeds Soil Genesis and Classification Soil Fertility Range/Pasture Livestock Production Wildlife Ecology and Habitat Soil Water Management Forage and Pasture Management Rangeland Management Rangeland Management		
		At least two of the following: Introductory Crop Science Introductory Animal Science Introductory Horticulture Introductory Agroforestry Industrial Vegetation Management Agricultural Machinery Land Management Technologies Introductory Marketing Introductory Agricultural	At least one of the following: Annual Crops Perennial Crops Horticultural Crops Agroforestry Soil Fertility Irrigated or Dryland Crop Water Use At least one of the following: Weed Science Agricultural Entomology	Species-Specific Production Systems Animal Health and Welfare Introductory Animal Nutrition Feeds and Feeding Advanced Genetics/Genomics Reproductive Physiology Animal Diseases Animal Housing Introductory Agricutlural Economics Animal and Animal Products Marketing	Invasive Species and Weeds Soil Genesis and Classification Soil Fertility Range/Pasture Livestock Production Wildlife Ecology and Habitat Soil Water Management Forage and Pasture Management Rangeland Management Rangeland/Pasture Ecology		

2022-09-23 2 of 2