



Skill and Career Development in Agriculture

Ag Labour Summit

Oct 30, 2014



College Ag Training

Four Colleges with agriculture programs:

- Grand Prairie Regional College - Fairview
- Lakeland College
- Lethbridge Community College
- Olds College

University of Alberta - ALES



Lakeland College

- Comprehensive educational institution with 41 programs on two campuses.
- Approx. 8,000 full time and 3,000 part time students.



Vermilion Campus



Lloydminster Campus



Ag Sciences - Strategic Direction:

- Concentrate on commercial agriculture and ag business training; primary production and businesses that serve primary production.
- Engaged and involved learning; e.g. the Student Managed Farm model.
- Strong industry focus and application.
- Community responsibility & leadership.

Ag Science Programs

Two Year Diploma:

- AgriBusiness
- Animal Health Technology
- Animal Science Technology
- Crop Technology

One Year Certificate:

- General Agriculture
- Veterinary Medical Assistant
- Western Ranch & Cow Horse

Current enrollment = 378 students



It's Hands On at Lakeland:



Animal Science Technology Program 2014-2015

Year 1	
Semester I	Semester II
AN 124 - Animal Anatomy and Physiology (Marisa Moe)	AN 212 - Applied Livestock Nutrition (Darrell Hickman)
AN 133 - Animal Handling, Welfare and Ethics (Geoff Brown)	AN 239 - Reproductive Physiology (Marisa Moe)
CO 138 - Agricultural Communications (Lotte Kingsmill)	AN 261 - Principles of Leadership (Blair Dow)
CR 170 - General Agronomy (Andrea Bilodeau/Breanna Perkins)	VE 102 - Introduction to Diseases and Treatments (Marisa Moe)
MA 100 - Applied Problem Solving (Blair Dow)	AE 202 - Business Records and Reporting (Al Motley)
Credits: 15	Credits: 15
AN 330 - Dairy Cattle Production (Blair Dow)	AN 335 - Sheep Production Management (Blair Dow)
	AN 307 - Artificial Insemination (TBA)
	RF 140 - Beef Production (Lotte Kingsmill)
Credits: 3	Credits: 7

Year 2	
Semester III	Semester IV
AE 230 - Farm Financial Management (Tracy Quinton)	AN 260 - Livestock Marketing and Sales (Jamie Hansen)
AN 105 - Genetics of Livestock (Robert Dixon)	VE 347 - Food Safety and Meat Science (Lotte Kingsmill)
AN 365 - Student Managed Farm - Livestock I	EN 269 - Animal Facilities and Equipment (Geoff Brown)
CR 235 - Forage and Range Crops (Peter Walsh)	AN 366 - Student Managed Farm - Livestock II
Credits: 12	Credits: 12
AN 331 - Dairy Systems Management (Blair Dow)	AN 332 - Dairy Housing and Hoof Care (Blair Dow/Geoff Brown)
AN 325 - Feedlot Management (Geoff Brown)	AN 320 - Cow-calf Management (Geoff Brown)
Credits: 6	Credits: 6

* Diploma elective credits required is 9

** Credits required to graduate is 63

Crop Technology Program:

Year 1 Courses

- Economics in Agriculture
- **Student Managed Farm I**
- Agricultural Issues & Trends
- Business Records and Reporting
- Agricultural Communications
- Plant Science & Field Crops
- Integrated Weed Management
- Agricultural Computer Applications
- Post-Harvest Processing Facilities
- Commodity Marketing
- Tillage & Direct Seeding Systems
- Soil Science

Year 2 Courses

- Farm Financial Management
- Commodity Marketing
- **Student Managed Farm II**
- Sales and Sales Management
- Diversified Crop Production
- Integrated Pest Management
- Grain Harvesting Systems
- Pesticide Application Technologies
- Applications in Precision Farming
- Fertility Management
- Integrated Crop Management

Our *Student Managed Farm*

- 2200 acres of farm land
- CNH equipment arrangement
- 260 head Research Test Station
- 50 Cow Dairy Herd
- 120 cow Beef Herd
- 180 Sheep
- 100 A.I. Cows



Some Good News!

- Enrollments and graduation numbers in Ag programs are generally on the rise across Canada:
 - Ridgetwon Campus College - University of Guelph – 135 in 2009-10; 429 in 2013-14.
 - U of Manitoba – 24% increase in 2013-14
 - U of Saskatchewan – 10% increase 2013-14
 - Lakeland – 160 in 2007-08 to 375 in 2014-15
 - CADAP – 17 members have shown an increase – from 2% to 45%

Connecting with Industry

Interfacing, communicating and networking to better understand industry needs.



Connecting with Industry on the Labour Front:

- Co-op programs, practicums, summer work experience.
- Attendance at industry events – conferences, field days, annual meetings, farm visits, tours.
- Advisory Committees and other advisory opp's - focus groups, program reviews.
- Classroom and lab learning:
 - Guest lectures.
 - Demonstrations.
 - Lab activities.



Challenges & Opportunities

- Meeting the **specific** needs of the various industry sectors e.g. animal science
- Practicums and co-op programs:
 - finding placements and cooperators.
 - Assessment rigor and reporting.



Challenges and Opportunities

- Defining competencies and outcomes and assessments – to meet industry needs.
- How do we find ways to attract less traditional ag students to our industry.
- Declining budgets.



Challenges & Opportunities

- Networks, collaborations and partnerships.
- Career fairs, open houses.
- Advisory Committees.
- Leadership and direction – feedback loop ; surveys, etc.
- Foreign labor training.
- Non – traditional training e.g. on-line, blended learning.

Challenges & Opportunities

- Competency based education – we do that.
- Rigorous program reviews.
- CAHRC:
 - National Occupational Standards
 - Labor Market Information
 - National Ag Occupational Framework



Challenges & Opportunities

- More effective school to work transitions.
- Seamless transitions between post-secondary institutions.
- Post diploma training:
 - Continuing education – partnerships with industry.
 - Certificate training.
 - Combination of on-line and on the job training.

Thank You!

