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.
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

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

### Year 2

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

* 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!