The UCVM Veterinary Educational Model

Integrated core elective curriculum with a Distributed Veterinary Teaching Hospital - DVTH

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Teaching sites

Foothills Campus

Distributed Veterinary Learning Community

Spy Hill Campus

CSB

VSRS
UCVM DVM program in a nutshell

- Team taught integrated comprehensive core curriculum: four calendar years - 9 semesters of instruction
- Centrally managed
- Active learning activities in the classroom and laboratories
- Discipline courses ~15h
- Clinical skills – CS ~6h
- Clinical presentations – CP ~3h
- Professional skills – PS ~3h
- Field courses ~4 weeks/yr
- Self study time
- Final year with 40 weeks of rotation experiences
Key Features: First Three Years

- outcomes/competencies
  - “The UCVM Veterinarian”
  - Course outcomes; session learning objectives

- Integrated (basic/clinical; theoretical/practical)
  - Self-directed life-long learning

- Professional and clinical skills
  - Dedicated 80,000 sq ft facility: Clinical Skills Building
  - “hospital” equipped, teaching equipped, simulators
  - Pathology, necropsy suite, anatomy, skills areas

- Early and repeated experience in the DVTH
  - Bring in DVTH clinical faculty to teach in first 3 years
  - Take students out into the DVTH
Field courses

- Two weeks of each semester during the first three years

- Field courses have been designed to allow students to work under supervision for a focused time period within our Distributed Veterinary Learning Community sites on selected veterinary topics.
Foundation in disciplines

- Anatomy Histology
- Physiology
- Pathology - Pathohistology
- Molecular biology & genetics
- Behavior & Welfare
- Immunology
- Nutrition
- Epidemiology – Diseases in animal populations
- Animal Health and Society

Basic and applied sciences are integrated throughout the program
Clinical skills course

Hands on experiences from Day 1 on

- 6 hours contact time per week
- 20% of the overall contact time

- Clinical Skills courses offered in each semester of the first three years
- early and frequent contact with animals
- students will learn and practice clinical and professional skills necessary for the 4th year.

- learning modules for clinical examinations: diagnostic procedures clinical intervention and management clinical proficiency.
OSCEs – Objective structured clinical examinations

- 3 OSCEs in Years 1-3, 10 – 12 stations each
- Clinical Skills Course Overall Grades are Pass/Fail
- Students must demonstrate proficiency
Professional skills course

- training in communication
  Simulated client training
- people management
- critical and reflective thinking
- ethics
- Jurisprudence
- self care and professional renewal
- business operations
- informatics
- research.

Communication OSCE part of the in course assessment in years 1-3

Research project in year 3
Clinical presentations course

- offered in each semester of the first three years
- early contact with clinical case material
- application of discipline knowledge within clinical context
- integration of discipline knowledge

Integrated clinical examination (ICE)

Veterinary Simulated Patients online
- cases for self learning
- cases for summative assessment
4th Year Rotations – a total of 40 weeks

- 20 weeks mandatory core rotations
- 20 weeks AOE elective programs

**Core curriculum rotations – 20 weeks**

<table>
<thead>
<tr>
<th>20 weeks</th>
<th>4 weeks Clinical Laboratory Diagnostics</th>
<th>Work-place based assessments in different formats: Mini clinical evaluation exercise (mini-CEX), Direct observation of procedural skills (Dops), Case based discussion (CbD), In training evaluation reports (ITERS)</th>
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<tbody>
<tr>
<td></td>
<td>4 weeks Rural Community Veterinary Practice</td>
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<td>4 weeks Food animal</td>
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<td>4 weeks Equine</td>
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<td>4 weeks Small animal</td>
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**Assessment of clinical competencies (skills and knowledge) – “Integrated OSCES” etc.**
Outcomes
- Based on core competencies
- E.g. Case diagnosis and management, surgical skills, therapeutic decisions, professional communication, medical records, lifelong learning, good business practice, professional ethics, etc

Competencies: Skills list
- Specific (entry level skills)
- Not intended to be comprehensively covered
- Skills that students should know
- Cases in which it is appropriate for students to develop and refine their core competencies
Area of Emphasis (AoE) Elective Programs

Each AoE elective program is comprised of two courses:

- a 14-week AoE course
- a related 6 week clinical enrichment elective block

Students may select any combination of elective rotations to fulfill the requirement for 6 weeks of enrichment rotations.

Students must complete at least 10 weeks of rotations that are specific to the species or subject of the AoE, but they may also take up to the full 20 weeks in AoE specific rotations.
Private and public practices, federal and provincial agencies and other animal industry partners who will work with UCVM faculty to provide hands-on learning opportunities.
DVLC Clinical Faculty

- Appointed to faculty
- Practice paid for hosting students
  - Professional and operational costs
- Faculty liaison
- Modular DVLC faculty training
  - Rotation expectations
  - Small group teaching
  - Rounds
  - Assessments
  - Clinical communications
- Standards of practice?
  - On-going discussion
Clinical competency assessment in Year 4

- On-line submission

- Weekly assessments and end of rotation assessments
  - Key is standardization, clarity and consistent application

- Assessment types
  - Direct observation of procedural skills (DOPS)
  - Mini-clinical examination (Mini CEX)
  - In-training evaluation reports (ITER)

- Two weeks of on-campus evaluations
  - integrated OSCEs
  - Case based discussions (CbD)
Assessment of competencies

Clinical Skills
- Years 1-3
  - OSCE

Professional Skills
- Years 1-3
  - OSCE
  - Portfolios
  - Constructed response

Clinical Reasoning Skills
- Years 1-3
  - OSCE
  - written and computer simulated case based

Foundational Knowledge
- Years 1-3
  - selection and constructed response

Integrated OSCE end of 3rd year

4th Year Clinical Rotations
- Direct Observation of Procedural Skills (DOPS)
- Mini Clinical Examination (mini – CEX)
- Case based Discussion
- In training evaluation form-

Eportfolio

Integrated OSCE Year 4- After GVP rotations
Strengths of our program

- Integrated teaching
- Team approach
- Outcome based
- Clinical skills course
- Professional skills
- Integrated training in Veterinary communication
- OSCES
- DVTH
  - Type and quantity of caseload
  - Diversity of experiences
Who we are

- Canada’s fifth accredited veterinary college
- Committed to meeting veterinary, animal and public health needs in Alberta
- Provide a comprehensive general veterinary education with enhanced educational opportunities in our areas of emphasis.
- Integrated hands-on program
- Collaborating with local veterinary and other community partners to deliver the practicum training program
- Research and post-graduate education programs
What our partners told us

- We need graduates that are competent confident, communicate (the three “C’s”)  
  - Skills required for general practice

- Students have to enter our practices in fourth year with the basic clinical skills

- Give us outcomes/competencies/skills

- Teach us to teach

- Give us access to your faculty/specialists
Assessment

- Outcome based assessment
- Guidelines for assessment
- We assess knowledge, skills, and attitudes
- Different formats and multiple assessments
- Formative assessment
- Summative assessment
- OSCEs
- In course assessment using clickers
- Students evaluation of teachers and course