

**WHO WILL
TRANSFORM VETERINARY
MEDICAL EDUCATION?**



SPARTANS WILL.

College of Veterinary Medicine
Curriculum Reinvention One Semester in



Support Student Wellness

- Build in opportunities for students to develop relationships with faculty
- Focus on day one readiness and develop a passion for lifelong learning
- Create a more engaging, authentic, and focused experience for students

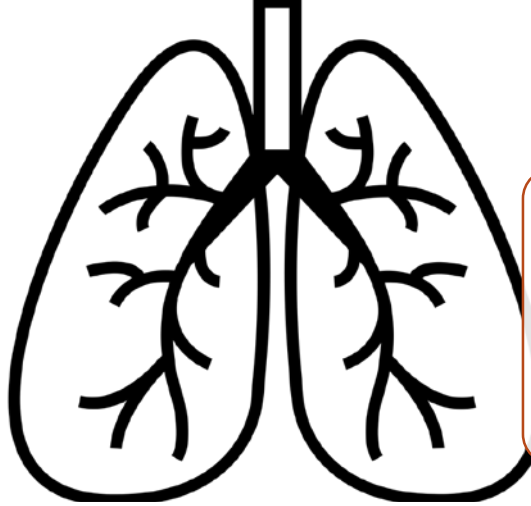


Ensure a Seamless Student Experience

- Provide consistency in the look and feel of courses
- Teach clinical skills earlier for a smoother transition to practicing veterinary medicine
- Work across the college to ensure that students develop the knowledge, attitudes, and skills needed to be successful

Why are we doing this curriculum redesign?

Systems-Based



- Year 1: Normal
- Year 2: Abnormal
- Year 3: Clinical reasoning

Aligned with Competencies



Knowledge
Skills
Attitudes

Active Learning



Flipped classroom
Case-based learning
Clinical Skills

**What does
this entail?**

What Models are used in the Curriculum?



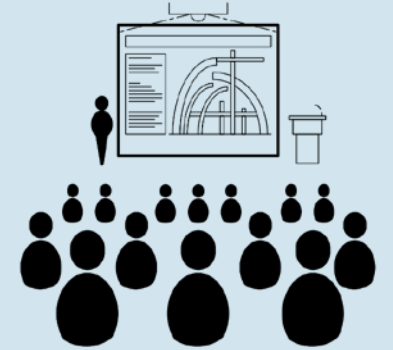
Flipped Classroom:
Knowledge transfer happens outside of class



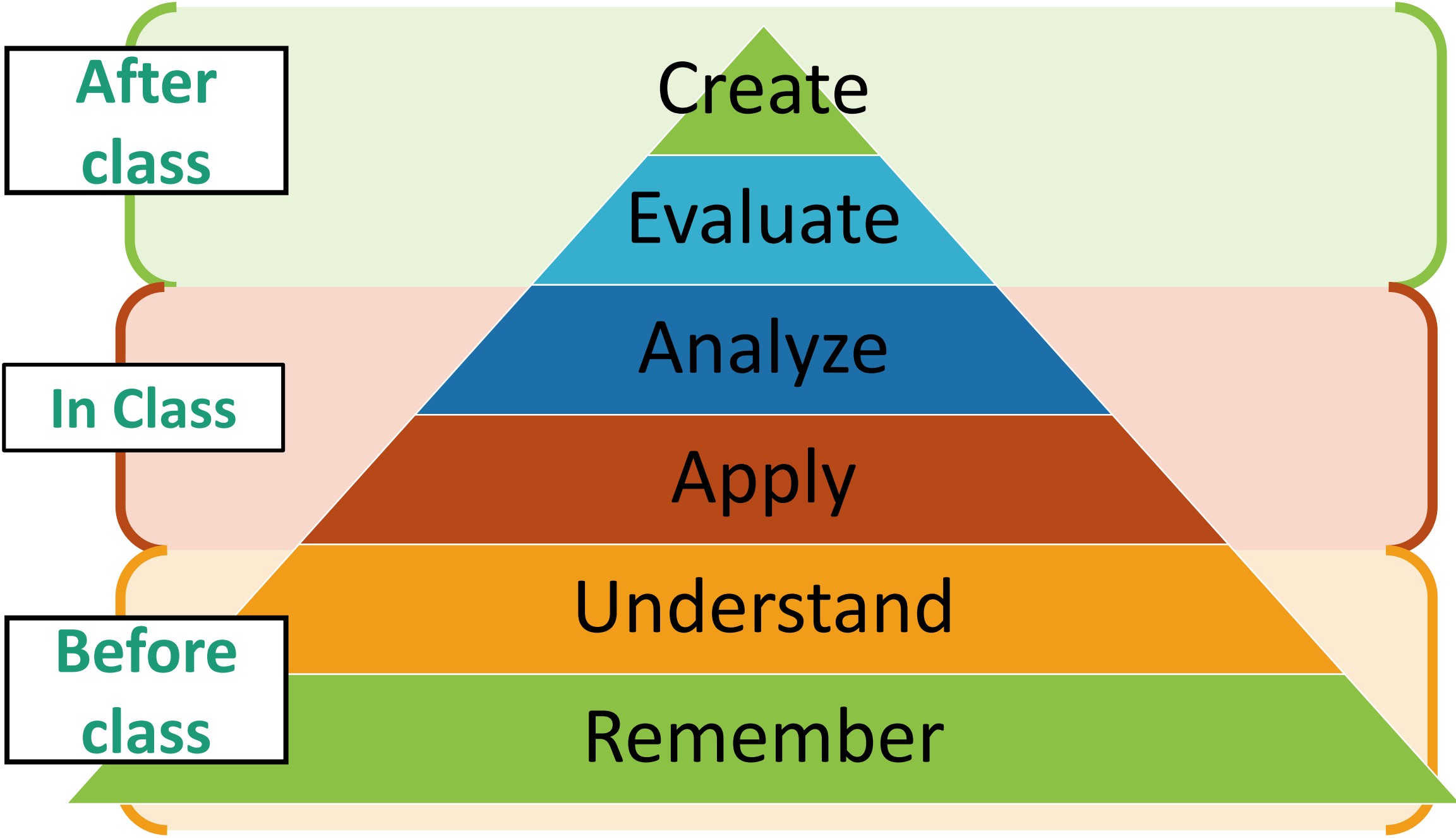
Active Learning:
Class time is reserved for application



Clinical Skills:
Students are exposed to clinical skills and live animals much sooner



Case-Based Learning:
Students learn basic sciences in the context of clinical cases





Year One:

Normal

Animals in Society (2 weeks)	Fundamentals in Veterinary Science (2 weeks)	Nervous System (3 weeks)	Cutaneous System (2 weeks)
Musculoskeletal System (3 weeks)	Cardiovascular System (3 weeks)	Respiratory System (3 weeks)	Immunology & Hematology System (3 weeks)
Digestive System (3 weeks)	Endocrine System (3 weeks)	Reproductive System (2 weeks)	Urinary System (2 weeks)

Veterinary Doctoring, One Health, and Practice
Management and Finances: Year long

Year Two:

Abnormal

Fundamentals in
Veterinary Science
II
(4 weeks)

Immunology &
Hematology
System
(3 weeks)

Respiratory System
(3 weeks)

Cutaneous System
(2 weeks)

Reproductive
System
(3 weeks)

Digestive System
(3 weeks)

Musculoskeletal
System
(2 weeks)

Nervous System
(3 weeks)

Urinary System
(3 weeks)

Cardiovascular
System
(2 weeks)

Endocrine System
(3 weeks)

Veterinary Doctoring, One Health, and Practice
Management and Finances: Year long

Year Three:

Clinical Reasoning

Clinical Reasoning I
(8 weeks)

Clinical Reasoning II
(7 weeks)

Surgical and
Anesthetic Skills
(3 weeks)

One Health
(Full semester)

Doctoring
(Full semester)

Practice
Management and
Finances
(Full semester)

Clinical Reasoning
III
(5 weeks)

Junior Clinical
Experience
(3 weeks)

Clerkship
(3 weeks)

Clerkship
(3 weeks)

Clerkship
(3 weeks)

How are we Measuring Success in the New Curriculum?



Student
Knowledge
Development



Student Skill
Development



Student
Wellness



Student
Confidence



Self Determination Theory: Deci & Ryan, 2000

Competency

- Confidence in one's knowledge and skills

Relatedness

- A sense of belonging in one's community

Autonomy

- A sense of control over one's work

Together, these three factors lead to a greater sense of **increased intrinsic motivation** – where students **become lifelong learners** who are able to **persevere through challenging situations**

Based on student feedback...

What's Working?

- Increased access to and interaction with course faculty
- Connecting knowledge and skills to better apply material and reinforce concepts
- Earlier and more frequent opportunities to interact with live animals and instructional models
- Prep work before class along with self-assessment gives students a sense of confidence going into class
- Well-structured small group sessions build rapport and prepare students to work in clinical teams

Where can we Improve?

- Organization – keeping a consistent format in each D2L site
- Logistics – limited space was a challenge and sometimes resulted in last minute changes
- Staying ahead of students – Y1 moderators have learned the challenges of jam-packed course schedules if they don't have all material finished and loaded online
- Better preparing students for increased group work – effective small groups require students to have strong skills in giving and receiving feedback and managing conflict
- Believing in and following the model – old habits are hard to break and change is difficult

Characteristics of Successful Course Teams

Regular participation
in the Faculty Learning
Community

Meeting course
production milestones
on time

Ongoing collaboration
with team members
and instructional
design team

Feeling that work
spent on curricular
reinvention is
supported and valued

Have gone “all in” on
the educational
models guiding the
new curriculum

From the Faculty:

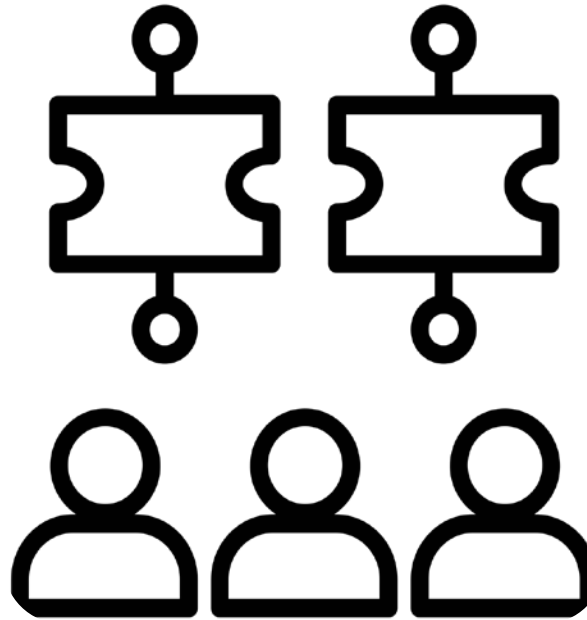
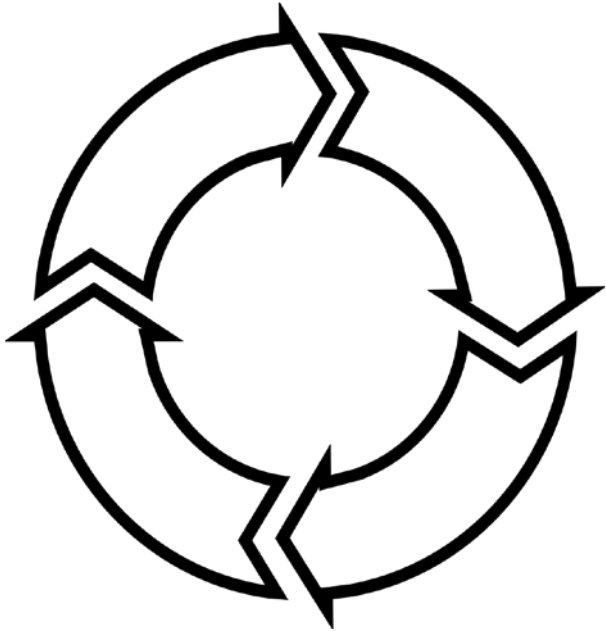
Tackling this first year of the new curriculum has been indeed challenging. However, the effort has paid great dividends according to the positive student feedback. Students enjoyed the hands-on experiences, the applied pedagogical approach, the facilitation and coaching they received as they gained new knowledge and developed their competency in new skills. I know we especially enjoyed the interactive nature of the classroom and the opportunity to engage students in a meaningful way. The Clinical Skills Lab practice effectively instilled student confidence as they built their live animal handling and biosecurity skill competence.



General feedback so far:

- More time is needed for faculty to devote to developing their courses
- Nearly all faculty wish they had their course more polished before it went live to students
- Faculty were pleasantly surprised by how much fun they had teaching in the new curriculum because they interact more closely with students and with their colleagues
- Carrying out the logistics needed for active learning and clinical skills teaching is time intensive and challenging

Moving Forward: Next Steps



Reflect

- Look at what didn't work and make plans for improvement
- Continue to gather student feedback, observe faculty teaching, and strengthen the model

Continue Alignment Work

- Construct curricular maps
- Identify opportunities for continuity between courses in Y1 and connections with Y2

Develop Year 2 & Year 3

- Year 2 has been in development since October 2018
- Year 3 will begin design in the coming months

One Health Course Series

- New course series in the new curriculum, 5 courses, each 1 credit
 - VM 501 Yr 1 Semester 1
 - VM 504 Yr 1 Semester 2
 - VM 507 Yr 2 Semester 3
 - VM 510 Yr 2 Semester 4
 - VM 538 Yr 3 Semester 5
- Disbanded the legacy public health course (VM 544)
 - Include much of the food safety and zoonotic disease content
 - Plus a lot of new content

CBVE Competencies vs One Health Competencies

CBVE – Competency-Based Veterinary Education

- Clinical reasoning
- Individual Animal Care and Management
- Animal Population Care and Management
- Public Health
- Communication
- Collaboration
- Professionalism and Prof Identity
- Financial and Practice Management
- Scholarship

One Health Professional Competencies not already covered by CBVE

- Systems Thinking
- Leadership
- Cultural Sensitivity
- Management

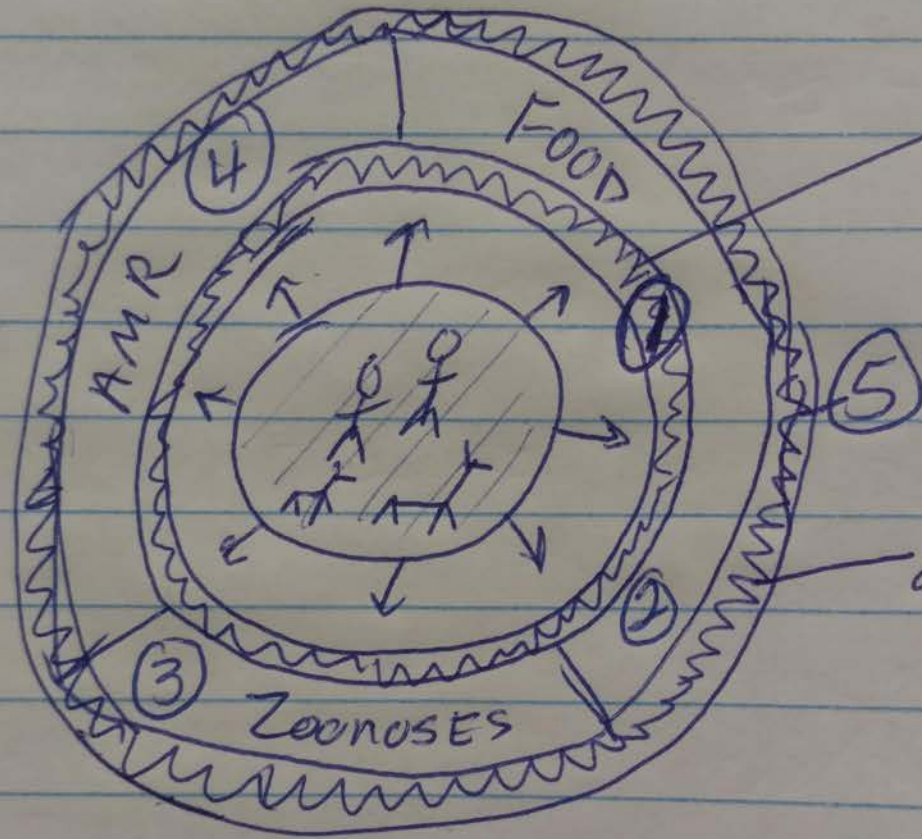
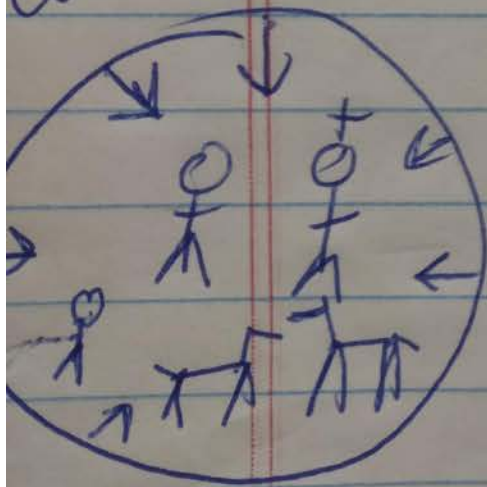
Course Series Topics

- VM 501 Yr 1 Semester 1
 - Overview of One Health, Organization of Medicine/Health, Introduction to Disease, Public Health
- VM 504 Yr 1 Semester 2
 - Food Safety, Food Security, US Regulatory Framework, Global Food Issues/Trade
- VM 507 Yr 2 Semester 3
 - Zoonoses, Disaster Response, Cultural Sensitivity
- VM 510 Yr 2 Semester 4
 - Antimicrobial Resistance, Collaboration and Partnerships, Management Skills Dev, Systems Thinking
- VM 538 Yr 3 Semester 5
 - One Health Challenge Projects

One Health Course Visual

6/27/19

Systems
Courses



Intro to OH

One Health Challenging
Projects

any
questions?

