

NC STATE
UNIVERSITY

College of
Veterinary Medicine

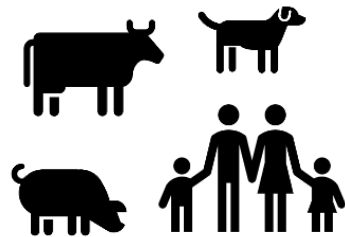
CURRICULAR REVIEW SUMMARY

MISSION AND VISION

An NC State DVM graduate will...



Demonstrate professional competence in the practice of veterinary medicine



Promote animal and public health



Engage in scientific inquiry



Use foundational knowledge and skills to succeed within a diverse and changing profession

... in alignment with the land grant mission

MISSION AND VISION



Veterinary professional competence

=

Resourceful, capable, and ethical provision of veterinary services



Requires



Skills, knowledge, and dispositions



- Self-regulated learning and working habits
- Interpersonal and cultural awareness
- Appropriate professional values



Competence in core cognitive, interpersonal, and psychomotor skills **transferable across species and contexts**

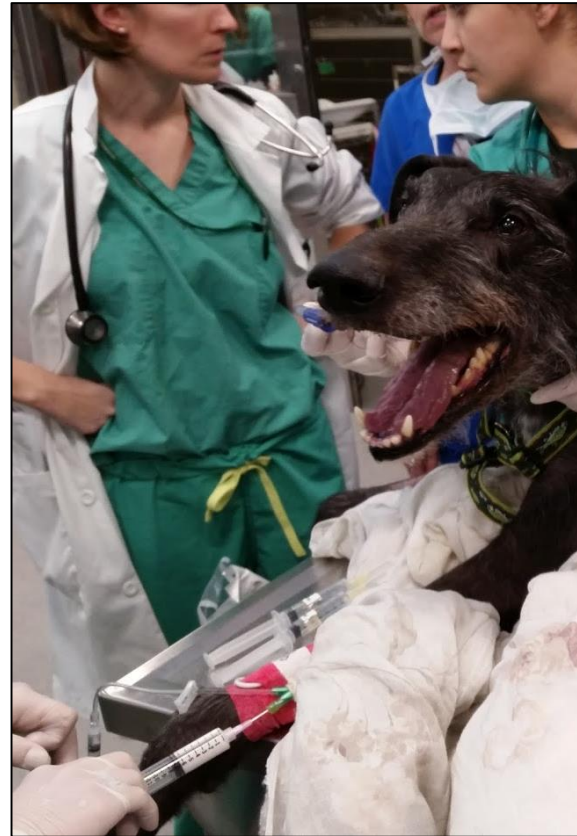
Opportunities for proficiency within areas of professional interest

GUIDING PHILOSOPHIES

The end goals of the curriculum guide content and structure



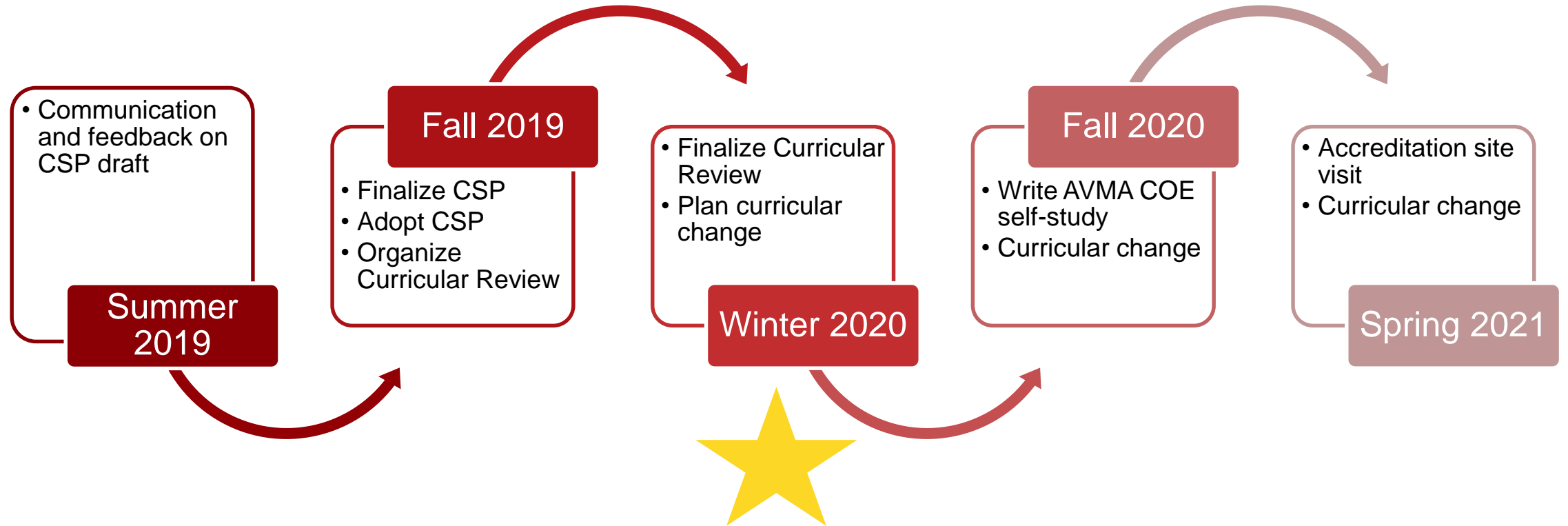
Knowledge, skills, and dispositions are interconnected and critical to competence



Veterinary practice requires flexible and creative transfer of knowledge across contexts

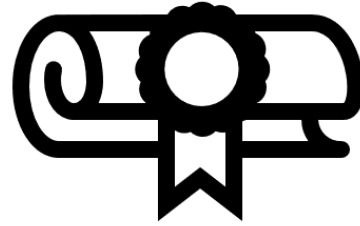


TIMELINE AND NEXT STEPS



INTRODUCTION

What do we mean by “curriculum”?



Everything students experience during the educational process

Explicit



Hidden



Written curriculum



Taught curriculum



Assessed curriculum



Schedule and structure



Extra-curriculars



Student-educator interactions



Social environment



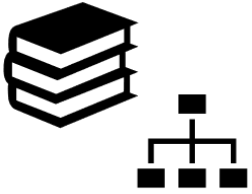
Implicit rewards



What we don't teach

CHARGE

To evaluate and determine **strengths**, **weaknesses**, and **opportunities** for the following dimensions:



Curriculum

Content
Alignment
Duration
Management
Evaluation



Educational Practices

Learning outcomes
Pedagogy
Effectiveness & efficiency
Instructional Quality



Outcomes Assessment

NAVLE
Graduate & employer feedback
Competency attainment
Formative & Summative



Student Experience

Engagement
Support structures
Wellness
Climate/Culture

WHO AND HOW

Core Team

Phil Sannes

Jonathan Fogle

Katie Sheats

Lysa Posner

Adeline Noger

Derek Foster

John Jeon

Laura Nelson

Jesse Watson

CSP Team

Kathy Lunn

Rocio Crespo

Mat Gerard

Amy Snyder

Mat Gerard

Adam Birkenheuer

John Gadsby

Eli Cohen

Megan Jacob

Regina Schoenfeld

Brenda Stevens

Representatives

Student Services

ESS

Teaching staff

6 meetings

1 major topic per meeting

Blue team/Red team

Results summarized and shared

GOALS FOR TODAY

- 1. Share findings**
- 2. Seek input**

What conclusions most resonate with you?

What surprises you?

Where do you need more information?

Is anything missing?



SUMMARIZED FINDINGS

NC STATE

Veterinary Medicine

CURRICULUM (AVMA COE STANDARD 9)

Dimensions:

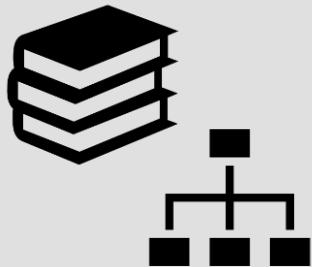
Content

Alignment

Duration

Management

Evaluation



Strengths

- Instructional time devoted to each AVMA CoE competency area
- Early mapping of learning outcomes is helpful

CURRICULUM (AVMA COE STANDARD 9)

Dimensions:

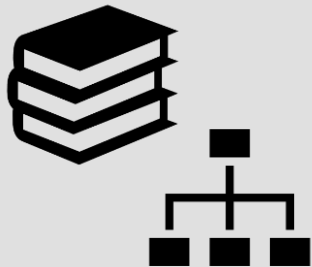
Content

Alignment

Duration

Management

Evaluation



Weaknesses

- Content organization does not effectively scaffold development of competence
- Skills and knowledge not integrated to facilitate co-development over time
- Selectives used to fill gaps in smaller focus areas due to narrow core curriculum with a small animal focus
- Limited access to key selectives and electives for some focus areas

CURRICULUM (AVMA COE STANDARD 9)

Dimensions:

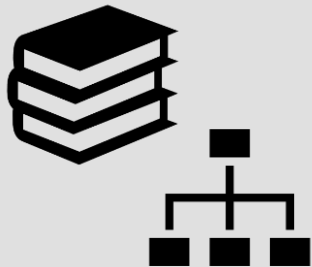
Content

Alignment

Duration

Management

Evaluation



Recommendations

- Reorganize content delivery around integrated systems or processes (currently, organized by discipline and species) using a backward design approach
- Review balance of Core content with Elective/Selective, with transition toward a broader Core

Selectives?

Focus areas?

EDUCATIONAL PRACTICES

Dimensions:

Learning outcomes

Pedagogy

Effectiveness & efficiency

Instructional quality



Strengths

- Session-level learning outcomes are available for most courses.
- Clinical problem-solving courses, labs, and other courses engage students in interactive learning activities that stress higher order thinking
- Various organizations provide a suite of educational skills development opportunities
- Moodle course page quality and consistency improving

EDUCATIONAL PRACTICES

Dimensions:

Learning outcomes

Pedagogy

Effectiveness & efficiency

Instructional quality



Weaknesses

- Mixed understanding of best practices; uneven engagement in professional development
- Learning outcomes specific to courses, not integrated into curriculum
- No system or map to determine course prerequisites or timing of content delivery
- Skills and knowledge not mapped together, not integrated
- Assessment of teaching quality based predominantly on student evals, with rare peer reviews tied to promotion
- Unclear reward for improving educational practice
- Need to reframe mission and approach to team-teaching to provide a more consistent experience

EDUCATIONAL PRACTICES

Dimensions:

Learning outcomes

Pedagogy

Effectiveness & efficiency

Instructional quality



Recommendations

- Develop a functional curricular map for content integration
- Consider how faculty are prepared, assigned, and evaluated for teaching assignments, particularly in core curriculum

OUTCOMES ASSESSMENT (AVMA COE STANDARD 11)

Dimensions:
NAVLE

Graduate &
employer
feedback

Competency
attainment

Formative &
Summative



Strengths

- Surveys and summative assessments show basic knowledge, values, and most skills required of entry-level graduates
- Student and alumni survey responses are valuable; alumni participation rising
- All 9 COE competencies summatively assessed; formative assessment increasing across most courses

OUTCOMES ASSESSMENT (AVMA COE STANDARD 11)

Dimensions:
NAVLE

Graduate &
employer
feedback

Competency
attainment

Formative &
Summative



Weaknesses

- Limited development and observed evaluation of competence in clinical or advanced settings
 - Sense that students not prepared for clinics
 - Evaluation of skills not explicitly mapped across clinical curriculum; skills “falling through cracks”
- Lack of timely assessment and remediation opportunities when needed

OUTCOMES ASSESSMENT (AVMA COE STANDARD 11)

Dimensions:
NAVLE

Graduate &
employer
feedback

Competency
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Formative &
Summative



Recommendations

- Integrated capstone assessments for years 1-3
- Revise skills assessment and remediation systems in clinical rotations to increase clarity and ensure competence in core concepts
- Increased exposure to clinical concepts, environments, and practices in years 1-3

STUDENT EXPERIENCE

Dimensions:

Engagement

Support
structures

Wellness

Climate/
Culture



Strengths

- Selectives, electives, clubs, externships provide excellent learning outside of Core.
- Student feedback heavily used to evaluate course quality and to influence direction of development
- Student evaluations generally positive about college and learning experience; alumni satisfaction with career and specialization high

STUDENT EXPERIENCE

Dimensions:

Engagement

Support
structures

Wellness

Climate/
Culture



Weaknesses:

- Increasing levels of stress and anxiety related to academics and quality of life
- Too much variance in quality of advising
- Mixed messaging about academic priorities; curricular structure emphasizing/conflating grades over mastery; limited formative development
- Trends toward solo study, avoidance of lectures creates disconnect between students, faculty

Grading?

STUDENT EXPERIENCE

Dimensions:

Engagement

Support
structures

Wellness

Climate/
Culture



Recommendations

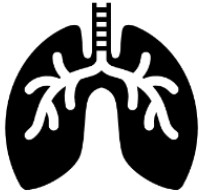
- Restructure week to allow more student flexibility
- Review training and support for advisors
- Develop feedback systems for values and professional dispositions development

What do you think?

CURRICULAR CHARACTERISTICS



Curriculum determined by outcomes
(learner-centered)



Content integrated vertically and horizontally



Core competency with opportunity for
specialized proficiency



Purposeful integration of skills, knowledge,
dispositions



Effective map and management

FRAMEWORK

Competency
criteria define core
and specific content
and annual targets
for growth



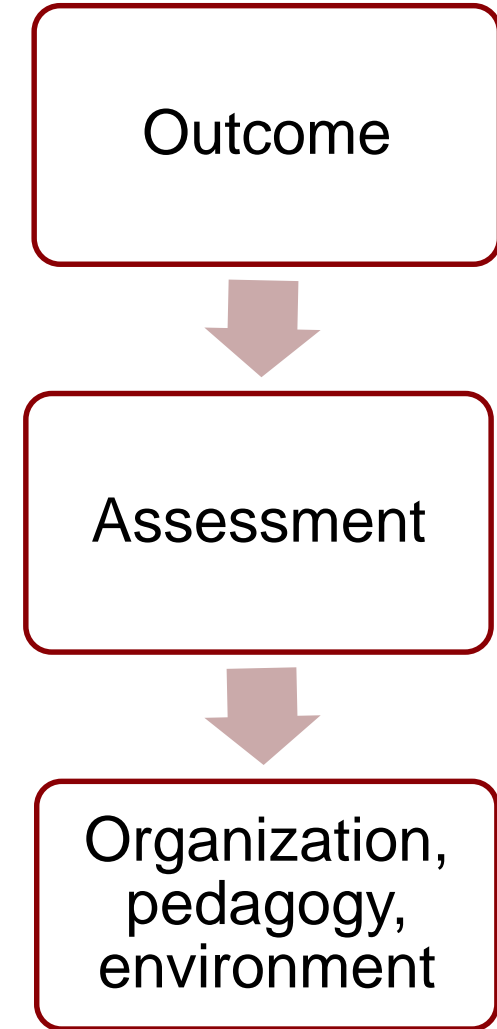
Instruction connects
and develops core
skills and concepts
across years and
content areas



Assessment guides
student development
and measures
student, course, and
curricular outcomes

CURRICULAR STRATEGIC PLAN GOALS

- 1. Define desired graduate outcomes, inclusive of knowledge, skills, and dispositions**
- 2. Identify evidence that would reflect successful attainment of graduate outcomes**
- 3. Define curricular characteristics that improve the likelihood that all students attain desired outcomes**



ESTABLISHING CRITERIA: DISPOSITIONS



Self-Regulation

Risk-comfortable, adaptable, resilient, self-aware, engaged, realistic, positive outlook



Professional Values

Creative problem-solvers, independent life-long learners; collaborative; organizational pride, confident, have integrity, act professionally; animal advocates.



Interpersonal Awareness

Collegial, caring, and compassionate; open-minded, culturally aware, service-oriented



ESTABLISHING MEASUREMENT: PHILOSOPHY



Assessment is driven by curricular and course goals



Consistency in assessment methods within and between courses



Assessment of learner, course, curriculum



Opportunities for remediation

ESTABLISHING MEASUREMENT: LEVELS



Learner

Formative: frequent, low-stakes

Summative: periodic; course or thread-focused

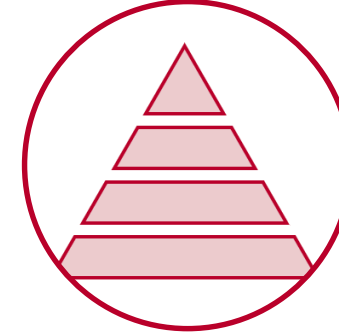
Milestone: end of year/term; integrated, applied content



Course

Effectiveness at meeting learning goals (learner data)

Student feedback



Curriculum

Effectiveness of combined courses in meeting year learning goals/preparation for next year

Goals of curriculum in light of changes in profession

