

***Development of a Plan B Master's degree
program in Veterinary Clinical Care to
create Veterinary Professional Associates
(Vet PAs or VPAs)***

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Origin of the term “Veterinary Professional Associate”

Kogan L and Stewart S, 2009. Veterinary Professional Associates: Does the Profession's Foresight Include a Mid-Tier Professional Similar to Physician Assistants? *JVME*, Vol. 36. pp. 220-225.

“Perhaps veterinary professional associates, modeled after PAs, could be employed to handle routine veterinary care and thereby allow veterinarians additional time to focus on the more demanding and challenging aspects of veterinary medicine. Perhaps a team approach, similar to the physician/PA team, could help the field of veterinary medicine to better serve both clients and patients”

An idea that arose from several sources:

Franklyn Garry, DVM, 2010. Training Bovine Health Professionals for the Future. Western Dairy News.

“There are many places that we could employ animal health paraprofessionals, much as our colleagues in human medicine do, and substantially improve the delivery of livestock health care. What if we developed a model that includes the equivalent of human nurse practitioners or physician assistants?”

An idea that arose from several sources:

National Research Council, 2011: Workforce Needs in Veterinary Medicine:

“In rural areas, where primary veterinary care is needed but there are too few farms to support full-time veterinarians, a system of animal health care involving rigorously trained technicians under the supervision of veterinarians could be developed”

VPA Program Summary:

The MSB-VCC program will build upon a student's undergraduate training in the life sciences to provide them with advanced knowledge and technical skills to be competent in the administration of routine veterinary care.

The proposed program, designed to be completed in 5 semesters, will accomplish this goal through:

1. A rigorous curriculum designed to provide in-depth knowledge in infectious, metabolic, neoplastic and degenerative disease.
2. A curriculum that includes the development of expertise in both technical, communication and leadership skills.
3. Taking full advantage of the facilities and expertise available in CSU's Department of Clinical Sciences, the Veterinary Teaching Hospital and the SPUR Campus

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Proposed MSB-VCC Prerequisites

(all prerequisites can be completed with either in-person or online CSU courses)

Communication (3 credits)	Course Title	Credits
CO 150 (in-person or online)	College Composition	3
Mathematics (5 credits)		
MATH 117 (in-person or online)	College Algebra I	1
MATH 118 (in-person or online)	College Algebra II	1
STAT 100 (in-person)	Statistics Literacy	3
<u>or</u> STAT 201 (online)	General Statistics	(3)
Biology (6-7 credits)		
LIFE 102 (in-person or online with in-person lab)	Attributes of Living Systems w/ Lab	4
<u>or</u> BZ 110 (online)	Principles of Animal Biology	(3)
LIFE 201B (in-person)	Introductory Genetics	3
<u>or</u> SOCR 330 (online)	Principles of Genetics	(3)
Chemistry (4 credits)		
CHEM 103 (in-person or online)	Chemistry in Context	3
CHEM 104 (in-person or online)	Chemistry in Context Lab	1

Proposed MSB-VCC Prerequisites (continued)

Anatomy/Physiology (10 credits)

BMS 305(in-person)	Domestic Animal Gross Anatomy	4
<u>or</u> VS 333 (online)	Domestic Animal Anatomy	(4)
BMS 360 (in-person)	Fundamentals of Physiology	4
<u>or</u> BMS 300 (online)	Principles of Human Physiology	(4)
BMS 302 (in-person)	Laboratory Principles of Physiology	2
<u>or</u> BMS 320 (in-person or online)	Virtual Laboratory in Physiology	(2)

Physics (4-5 credits)

PH 110 (in-person)	Physics of Everyday Phenomena	3
and PH 111 (in-person)	Physics of Everyday Phenomena Lab	1
<u>or</u> PH 121 (online)	General Physics	(5)

Microbiology (3 credits)

MIP 300 (in-person or online)	General Microbiology	3
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Total Prerequisite Credits = 35- 37

Proposed MSB-VCC Curriculum

1st Semester (online)

VS 5XX Animal Behavior & Welfare	2
VS 5XX-2 Clinical Anatomy	2
VS 5XX- Principles of Radiology and Ultrasound	2
VS 5XX-6 Infectious Pathogens and Parasites	3
VS 5XX-4 Fundamentals of Disease I	3
VS 5XX-5 Foundations I (Communications, History, Physical Exam, Surgical Skills)	2
Total Semester Credits =	14

2nd Semester (online)

VS 5XX- Nutrition and Metabolism	2
VS 5XX Toxicology	1
VS 5XX-8 Clinical Pharmacology	3
VS 5XX-9 Fundamentals of Disease II	3
VS 5XX-15 Practice Management & Team Leadership	2
VS 5XX-10 Foundations II (Communications, Clinical Reasoning)	2
Total Semester Credits =	13

3rd Semester (online)

VS 5XX Fundamentals of Shelter Medicine	1
VS 5XX-11 Principles of Anesthesia	2
VS 5XX-12 Principles of Surgery	2
VS 5XX-13 Preventative Medicine	2
VS 5XX Fundamentals of Disease III	3
VS 5XX-1 Issues in Veterinary Medicine	1
VS 5XX-16 Foundations III (Communications, Clinical Reasoning, Medical Records)	2
Total Semester Credits =	13

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Proposed MSB-VCC Curriculum (continued)

4th Semester (in person)

VS 6XX-2 Comprehensive Physical Exam Lab	2
VS 6XX-3 Anesthesia Lab	2
VS 6XX-4 Clinical Pathology Lab	2
VS 6XX-5 Clinical Skills Lab	3
VS 6XX-6 Communications Lab	1
VS 6XX-7 Surgical Skills Lab	2
VS 6XX-8 Dentistry Skills Lab	2
	14
Total Semester Credits =	14

5th Semester (practicum/internship)

VS 6XX-9 Training in clinical procedures and application of clinical reasoning for the diagnosis, treatment, and prevention of animal diseases, integrating principles of communication, teamwork, and professionalism.	10
VS 6XX-10 Veterinary Clinical Care Capstone	2
	12
Total Semester Credits =	12
Total Program Credits =	66

VPA Clinical Competencies

General

Establish Veterinary-Client-Patient Relationship (VCPR)

Perform Comprehensive Physical Exam

Develop Diagnostic & Treatment Plans

Proficiency in providing a continuum of acceptable care

Recognize case complexity for appropriate referral to DVM

Basic imaging (X-ray and ultrasound) interpretation

Authorization of prescription refills

Hospice/palliative case management

Perform Euthanasia

VPA Clinical Competencies (continued)

Preventive care

Behavior, socialization & training

Develop vaccine protocol based on risk assessment

Heartworm testing and prevention

Internal parasite testing and prevention

External parasite testing and prevention

Interpretation of routine Dx tests

Nutritional management

VPA Clinical Competencies (continued)

Diagnosis and Treatment of common/uncomplicated medical conditions

Cardiac Disease

Ear infections

Eye infections/ulcers

Gastroenteritis (vomiting/diarrhea)

Lameness

Obesity

Oral/periodontal Disease

Respiratory Disease

Skin infections/allergies

Urinary tract Disease

VPA Clinical Competencies (continued)

Dx and Tx of common/uncomplicated surgical conditions

Laceration repair/surgical closure

Abscess/wound management

Superficial mass removal

Dental extractions

Castrations and Spays

Aural hematomas

Surgical & dental rechecks

VPA Clinical Competencies (cont.)

Shelter medicine

Disease outbreak response

Population rounds

Parvo, distemper, panleuk & URI treatment

Intake assessments

Behavior support medications

Animal welfare audits

Infection control/Biological risk management

Rabies sampling

VPA Clinical Competencies (cont.)

Livestock & poultry medicine

Vaccine application & program management
Body condition assessment & monitoring
Calving management
Milk sampling & Mastitis Dx and management
Neonatal care
Mortality assessment (necropsy)
Pregnancy Dx & reproduction management
Metabolic disease monitoring
Lameness Dx & hoof trimming
Infectious disease monitoring
Animal welfare audits
Reportable disease assessment & monitoring
Livestock worker training

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VPA Non-Clinical Competencies

Leadership training

Communications

Client and patient care coordination

Critical thinking

Business acumen (P&L, fixed vs variable costs)

MSB-VCC program benefits:

Integration of the MSB-VCC program with CSU's DVM training program will allow the teaching of a team approach to the practice of veterinary medicine. An expected outcome from integrating these programs is the training of veterinary professionals and veterinarians to work more efficiently and effectively together. This increased efficiency, combined with greater capabilities of MSB-VCC graduates, will enhance the productivity of the veterinary healthcare team.

An Alternative Practice Model

The veterinary healthcare team's ability to increase productivity* is key to providing greater financial reward to both veterinarians and veterinary professional staff without raising the cost of veterinary healthcare. Additionally, increased efficiency in the delivery of veterinary services provides an opportunity to increase access to veterinary care for underserved populations.

*Will require modification of the CO veterinary practice act to allow VPAs to diagnose, treat and perform surgery under the supervision of a licensed veterinarian who shall be responsible for the person's performance.

Questions?

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