

Status: PENDING

**PROGRAM REQUEST**  
Veterinary Medicine, College of - VMCOLL-DVM

Last Updated: Myers,Dena Elizabeth  
12/08/2010

**Fiscal Unit/Academic Org** Veterinary Medicine Admin - D2900  
**Administering College/Academic Group** Veterinary Medicine  
**Co-administering College/Academic Group**  
**Semester Conversion Designation** Converted with minimal changes to program goals and/or curricular requirements (e.g., sub-plan/specialization name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content)  
**Current Program/Plan Name** Veterinary Medicine, College of  
**Proposed Program/Plan Name** Veterinary Medicine, College of - VMCOLL-DVM  
**Program/Plan Code Abbreviation** VMCOLL-DVM  
**Current Degree Title** Doctor of Veterinary Medicine

**Credit Hour Explanation**

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		246	164.0	166	2.0
Required credit hours offered by the unit	Minimum	246	164.0	166	2.0
	Maximum				
Required credit hours offered outside of the unit	Minimum	0	0.0	0	0.0
	Maximum				
Required prerequisite credit hours not included above	Minimum	0	0.0	0	0.0
	Maximum				

**Program Learning Goals**

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

- Program Learning Goals**
- At the conclusion of the program, the students will have a sound medical knowledge base.
  - At the conclusion of the program, students will have the necessary skills for comprehensive patient diagnosis and management.
  - At the conclusion of the program, students will have strong professional and interpersonal skills.
  - At the conclusion of the program, students will have effective problem solving skills.
  - At the conclusion of the program, students will have the necessary skills to practice health promotion and disease prevention.

**Assessment**

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? No

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**DIRECT MEASURES (means of assessment that measure performance directly, are authentic and minimize mitigating or intervening factors)**

**Standardized tests**

- National standardized examination
- Certification or licensure examinations

**Evaluation of a body of work produced by the student**

- Practicum, internship or research evaluation of student work

**INDIRECT MEASURES (means of assessment that are related to direct measures but are steps removed from those measures)**

**Surveys and Interviews**

- Student survey
- Alumni survey
- Employer feedback or survey
- Student evaluation of instruction

**Additional types of indirect evidence**

- Job or post-baccalaureate education placement
- External program review
- Curriculum or syllabus review
- Comparison or benchmarking

**USE OF DATA (how the program uses or will use the evaluation data to make evidence-based improvements to the program periodically)**

- Analyze and discuss trends with the unit's faculty
- Analyze and report to college/school
- Analyze and report to accrediting organization
- Make improvements in curricular requirements (e.g., add, subtract courses)
- Make improvements in course content
- Make improvements in course delivery and learning activities within courses
- Make improvements in learning facilities, laboratories, and/or equipment
- Periodically confirm that current curriculum and courses are facilitating student attainment of program goals

**Program Specializations/Sub-Plans**

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

**Pre-Major**

Does this Program have a Pre-Major? No

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Veterinary Medicine, College of - VMCOLL-  
DVM

Last Updated: Myers,Dena Elizabeth  
12/08/2010

**Attachments**

- VMCOLLProfProgDeanLetter.pdf: Dean's Letter for Professional Program  
*(Letter from Program-offering Unit. Owner: Dibartola,Stephen Paul)*
- VMCOLLProgramGoals.pdf: Professional Program Goals  
*(Other Supporting Documentation. Owner: Dibartola,Stephen Paul)*
- VMCOLLProfessionalProgramRationale.pdf: Professional Program Rationale Statement  
*(Program Rationale Statement. Owner: Dibartola,Stephen Paul)*
- VMCOLLTimelineWithCAE.pdf: Program Timeline & CAE  
*(Other Supporting Documentation. Owner: Dibartola,Stephen Paul)*
- VMCOLLProfessionalCurriculumSummary.pdf: Professional Curriculum Summary  
*(List of Semester Courses. Owner: Dibartola,Stephen Paul)*

**Comments**

**Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Dibartola,Stephen Paul	11/19/2010 01:14 PM	Submitted for Approval
Approved	Dibartola,Stephen Paul	11/19/2010 01:15 PM	Unit Approval
Approved	Lairmore,Michael Dale	11/19/2010 01:22 PM	College Approval
Approved	Myers,Dena Elizabeth	12/08/2010 01:21 PM	GradSchool Approval
Pending Approval	Soave,Melissa A	12/08/2010 01:21 PM	CAA Approval



College of Veterinary Medicine

Office of the Dean  
125/127 Veterinary Medicine Academic Building  
1900 Coffey Road  
Columbus, OH 43210-1092

November 19, 2010

Phone (614) 292-1171  
Fax (614) 292-7185

Office of Academic Affairs  
203 Bricker Hall  
190 North Oval Mall  
Columbus OH 43210-1358

Dear Office of Academic Affairs:

On behalf of the College of Veterinary Medicine, we are pleased to recommend for approval the Program Plan for our professional program leading to the Doctor of Veterinary Medicine degree. The professional degree program is programmatically and physically self-contained within the College and does not overlap with other units in the University. This submission contains the details of our core professional program conversion only. By spring 2011, we will add the elective courses of the professional program as well as submit proposals for our graduate program (MS and PhD) and certificate program in Veterinary Public Health.

During the conversion process, we revisited and revised our professional program goals and also took into consideration the American Veterinary Medical Association's recommendations from the College's 2006 accreditation site visit and 2007 evaluation report. Recommendations included providing hands-on educational experiences with live animals earlier in the curriculum as well as increasing flexibility for students in their choice of clinical rotations during the final year of the program.

The College's Curriculum Committee led the process of semester conversion. Following are some of the milestones completed during the process:

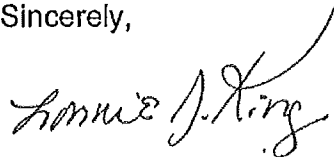
- Appointment of a Semester Conversion Task Force to review and discuss curricular issues associated with semester conversion. The task force's report was discussed at the College's Council on Education and accepted by interim Dean John Hubbell in June 2009;
- Development of updated program goals;
- Development of a FileMaker Pro curriculum database to capture data during curriculum revision and map curricular content to professional program goals and 3 knowledge categories (1: knowledge/comprehension, 2: synthesis/analysis/evaluation, 3: application/performance). Collection of this information facilitated identification of omissions and redundancies in the pre-clinical curriculum;

- Meetings of teaching teams to review courses and modify them to accommodate semester conversion;
- Several faculty forums to discuss proposed new courses and substantial changes in existing courses in the curriculum;
- Advisory votes of faculty to gauge the level of support for proposed curricular changes;
- Collection of comparative data about DVM professional degree programs at other US veterinary schools;
- Student forums to assess the quarter-based curriculum for unplanned redundancies and omissions and obtain suggestions for semester conversion; and,
- Meetings of *ad hoc* faculty groups interested in specific aspects of the curriculum (e.g. infectious diseases, clinical reasoning, professional development) to determine the best way to integrate these subjects into the curriculum. Input of these groups was shared with the Curriculum Committee and led to new courses or substantial modifications of existing courses.

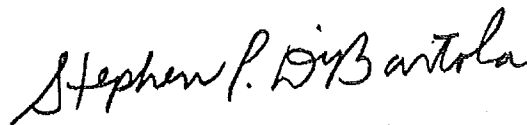
Throughout the conversion process, the College's Council on Education served as a venue to discuss and approve initiatives that arose from faculty discussions and the work of the Curriculum Committee. The Curriculum Committee acknowledges and appreciates the constructive nature of these discussions and the willingness of faculty to participate in the process and be receptive to change. Curriculum revision remains a work in process, and the College plans to continue assessment and improvement before, during, and after semester conversion.

The proposed professional degree curriculum was approved by the Curriculum Committee, Council on Education, and College Executive Committee, as well as supported by an advisory vote of regular College faculty.

Sincerely,



Lonnie J. King, DVM, MS, MPA, ACVPM  
Dean  
Ruth Stanton Chair in Veterinary Medicine  
Professor, Veterinary Preventive Medicine



Stephen P. DiBartola, DVM, ACVIM  
Associate Dean for Administration and  
Curriculum  
Professor, Veterinary Clinical Sciences

**Program Rationale**  
**College of Veterinary Medicine**  
**Doctor of Veterinary Medicine Professional Degree Program**

The DVM program is a four-year professional curriculum leading to the Doctor of Veterinary Medicine (DVM) degree and prepares graduates to take the North American Veterinary Licensing Examination which qualifies them to practice veterinary medicine. The DVM degree has been conferred at The Ohio State University since 1887. The College has taken semester conversion as an opportunity to review and revise a professional curriculum that has, with minor modifications, been in place since 1972. The proposed revisions incorporate current best practices in medical education and focus on clinical competencies outcomes assessment and recommendations from our accreditation evaluation by the American Veterinary Medical Association (AVMA) in 2007. We have classified the transition to semesters as “converted” because the general content of the program is similar to the quarter system version of the program. We revised our professional program goals early in the conversion process (see attachment) and used them to reformulate core professional courses as necessary. Two courses were eliminated (VM 608 Non-Mammalian & Avian Medicine and VM 700.21 Applied Veterinary Medicine: Veterinary Public Practice) and their core content was incorporated into other courses. The final 6 weeks of the quarter-based program (previously offered as elective time) have been reincorporated into the core professional curriculum, making it a full 9-semester program. The 9-semester format assures that this time is used for high-quality, academic endeavors and that appropriate costs are recovered.

Curricular revision has taken into consideration the AVMA’s recommendations from the College’s 2007 accreditation evaluation:

- In response to concerns about providing hands-on educational experiences early in the curriculum, we have implemented a vertically-integrated clinical reasoning course series in the curriculum. First-year students now will learn proper restraint and physical examination skills using live animals of the major domestic species.
- In response to concerns about lack of flexibility in the final clinical year, a proposal for a “Career Areas of Emphasis” (CAE) fourth-year clinical curriculum was developed by the Curriculum Committee and approved by the College’s Council on Education. All students are required to complete 26 weeks of core clinical rotations whereas the balance of their clinical year consists of clinical rotations tailored to specific career areas of interest and elective rotations (see attachment, VMCOLLTimelineWithCAE.pdf).
- In response to the expressed need for our students to develop non-technical skills, knowledge, and attitudes relevant to the practice of veterinary medicine, we have extensively revised the professional development course series and vertically integrated it into the first three years of the professional program.
- In response to the need to provide students with additional elective opportunities, we have reformulated the core professional courses and incorporated additional time in the curriculum for elective courses in the first three years of the program.

### **Program Goals**

See attachment (VMCOLLProgramGoals.pdf)

### **Course Listing**

See attachment (VMCOLLProfessionalCurriculumSummary.pdf)

### **Transition plan**

The professional degree program is a lock-step curriculum and all coursework is completed within the College. The transition plan deals with course progression, which has been changed to promote vertical integration of content.

- Course related issues

Transitions issues were identified to affect primarily the classes of 2015 and 2014. The class of 2013 will have the opportunity for additional clinical rotations due to the timing of the semester conversion. The transition process will begin in the 2011-2012 academic year to assure that students are prepared for the more vertically-integrated semester-based curriculum.

For the Class of 2015:

- Teach Introduction to Clinical Veterinary Medicine (VM 6570.01) in Winter quarter of VME I year (2012)
- Teach VM 6618 (Clinical Pathology) to both the class of 2016 and the class of 2015 in Autumn semester of 2012 and VM 6607 (Musculoskeletal System) to both the class of 2016 and the class of 2015 in Spring semester 2013 to accommodate the movement of these courses from the second to the first year of the curriculum. Move VM 6606 (Integumentary System) to Autumn semester 2012 from Spring semester 2013 to equalize course load for students.
- This class will be taught both VM 526 (Introduction to Radiology II) and VM 7526 (Veterinary Diagnostic Imaging) but this should not be problematic because VM 7526 is substantially different from VM 526.
- Integrate quarter-based professional development courses (VM 614.01, VM 560) with new semester-based professional development courses (VM 6614.03, VM 6614.04, VM 6614.05, VM 6614.06)

For the Class of 2014:

- Drop VM 562 (Introduction to Anesthesia) and VM 563 (Introduction to Surgery) from spring quarter of VME II year and replace them with VM 7562 (Introduction to Veterinary Anesthesiology) and VM 7563 (Introduction to Surgery) in Autumn semester of VME III year (2012)
- Some of the material in VM 7613 (Veterinary Emergency and Critical Care Medicine) in Autumn semester of VME III year (2012) may be redundant with material in VM 613 (Fluid Therapy) in Winter quarter of VME II year (2012) but this reinforcement of difficult material likely will be beneficial.

- This class will be taught both VM 526 (Introduction to Radiology II) and VM 7526 (Veterinary Diagnostic Imaging) but this should not be problematic because VM 7526 is substantially different from VM 526.
- Integrate quarter-based professional development courses (VM 614.01, VM 560, VM 614.02, VM 614.03, VM 614.04) with new semester-based professional development courses (VM 6614.05, VM 6614.06)
- This class will miss the first two clinical reasoning courses (VM 6570.01, VM 6570.02). However omission of VM 6570.01 and VM 6570.02 should not interfere with the students' ability to complete VM 6570.03, which is largely based on an existing case-based elective course.

For the Class of 2013:

- This class will begin clinical rotations 3/16/12 under the quarter system but will graduate 5/5/13 under semesters. If the May session is not used for this class, they will finish 4/22/13 and will have 2-3 additional clinical rotations, which will provide an opportunity for additional elective experiences.

- Advising

The Associate Dean for Academic and Student Affairs will work with class presidents to keep them informed about the transition plans. College policy on grade remediation requires that failing students repeat all coursework. For the 2011-2012 academic year, there may be one or two students who fail the first year while on the quarter system and would remediate this material on the semester system. The Office of Student Affairs will work with these students individually to accommodate their course work as needed.

- Program Progression Issues

Program progression issues are minimized because the professional degree program is a 9-semester, lock-step curriculum with all coursework offered within the College. Students may only matriculate during Autumn semester of their first year in the program.

#### ATTACHMENTS

1. Dean's letter (VMCOLLProfProgDeanLetter.pdf)
2. Course listing (VMCOLLProfessionalCurriculumSummary.pdf)
3. Program goals (VMCOLLProgramGoals.pdf)
4. Professional Program Timeline and "Career Areas of Emphasis" (VMCOLLTimelineWithCAE.pdf)



<b>College of Veterinary Medicine Doctor of Veterinary Medicine Professional Degree Program</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Semester Credits</b>
<b>Year One (38 core credits)</b>		
6510	Veterinary Preventive Medicine 1: Introduction to Epidemiology and Population Systems	3
6520	Gross Anatomy 1 (Dog, Cat, Pig)	4
6525	Introduction to Veterinary Diagnostic Radiology	1
6530	Comparative Structure and Function of Tissues	3
6540	Structure and Function of Cells	2
6614.01	Professional Development: 1	1
6618	Clinical Pathology	4
6641	Introduction to Animal Behavior	2
<b>Year 1 Semester 1 credit hours</b>		<b>20</b>
6521	Gross Anatomy 2 (Horse, Cow)	5
6550.01	Comparative Biology of Disease 1: General Pathology and Immunology	3
6550.02	Comparative Biology of Disease 2: Animal Pathogens	3
6607	Musculoskeletal System	3
6614.02	Professional Development: 2	1
6561	Principles of Veterinary Pharmacology	2
6570.01	Introduction to Clinical Veterinary Medicine	1
Various	Electives	2
<b>Year 1 Semester 2 credit hours</b>		<b>20</b>
<b>Year 1 Credit hours</b>		<b>40</b>
<b>Year Two (33 core credits)</b>		
6603	Nervous System	4
6602	Urinary System	3
6604	Endocrine System	3
6605	Reproductive System	3
6646	Veterinary Preventive Medicine 2: Zoonotic Diseases	2
6570.02	Clinical Veterinary Medicine Experience	1
6614.03	Professional Development: 3	1
Various	Electives	3
<b>Year 2 Semester 1 credit hours</b>		<b>20</b>
6609	Digestive System	4
6600	Cardiovascular System	3
6601	Respiratory System	3
6606	Integumentary System	3
6565	Introduction to Animal Welfare	1
6610.01	Clinical Veterinary Parasitology	1
6614.04	Professional Development: 4	1
Various	Electives	4
<b>Year 2 Semester 2 credit hours</b>		<b>20</b>
<b>Year 2 Credit hours</b>		<b>40</b>
<b>Year Three (27 core credits)</b>		

6570.03	Clinical Reasoning and Decision-Making	2
6612	Introduction to Comparative Veterinary Ophthalmology	2
7613	Veterinary Emergency and Critical Care Medicine	2
7562	Introduction to Veterinary Anesthesiology	1.5
7563	Introduction to Surgery	2
7564	Clinical Microbiology and Pharmacology of Antimicrobial Agents	1
6614.05	Profession Development: 5	1.5
7615.01	Small Animal Operative Practice	4
7615.02	Small Animal Medicine Diagnostic Techniques and Procedures	1
7616	Farm Animal Medicine Diagnostic Techniques and Procedures	1
7617	Equine Medicine Diagnostic Techniques and Procedures	1
6610.02	Applied Clinical Veterinary Parasitology	1
Various	Electives	1
<b>Year 3 Semester 1 credit hours</b>		<b>21</b>
6611	Veterinary Preventive Medicine 3: Emerging Diseases and Public Veterinary Practice	3
7526	Veterinary Diagnostic Imaging	2.5
6614.06	Professional Development: 6	1.5
7615.01	Small Animal Operative Practice	Continued
7615.02	Small Animal Medicine Diagnostic Techniques and Procedures	Continued
7616	Farm Animal Medicine Diagnostic Techniques and Procedures	Continued
7617	Equine Medicine Diagnostic Techniques and Procedures	Continued
6610.02	Applied Clinical Veterinary Parasitology	Continued
Various	Electives	10
<b>Year 3 Semester 2 credit hours</b>		<b>17</b>
<b>Year 3 Credit hours</b>		<b>38</b>
<b>Year Four (26 credits of CORE rotations: * = core, † = pick one, § = pick two)</b>		
7700.01	Applied Veterinary Medicine: Community Practice *	2
7700.02	Applied Veterinary Medicine: Shelter Medicine & Surgery *	2
7700.03	Applied Veterinary Medicine: Small Animal Internal Medicine *	2
7700.04	Applied Veterinary Medicine: Small Animal Surgery – Soft Tissue †	2
7700.05	Applied Veterinary Medicine: Small Animal Surgery – Orthopedics †	2
7700.06	Applied Veterinary Medicine: Farm Animal Medicine & Surgery *	2
7700.07	Applied Veterinary Medicine: Large Animal Ambulatory Services *	2
7700.08	Applied Veterinary Medicine: Equine Medicine §	2

7700.09	Applied Veterinary Medicine: Equine Surgery §	2
7700.10	Applied Veterinary Medicine: Equine Field Services §	2
7700.11	Applied Veterinary Medicine: Equine Emergency & Critical Care Medicine §	2
7700.12	Applied Veterinary Medicine: Radiology *	2
7700.13	Applied Veterinary Medicine: Clinical Anesthesiology *	2
7700.14	Applied Veterinary Medicine: Applied Pathology *	2
7700.15	Applied Veterinary Medicine: Small Animal Critical Care	2
7700.16	Applied Veterinary Medicine: Small Animal Emergency *	2
7700.17	Applied Veterinary Medicine: Ophthalmology	2
7700.18	Applied Veterinary Medicine: Dermatology	2
7700.19	Applied Veterinary Medicine: Cardiology	2
7700.20	Applied Veterinary Medicine: Small Animal Neurology	2
7700.21	Applied Veterinary Medicine: Small Animal Oncology	2
7700.22	Applied Veterinary Medicine: Theriogenology	2
7700.23	Applied Veterinary Medicine: Advanced Theriogenology	2
7700.24	Applied Veterinary Medicine: Preventive Medicine *	2
7700.25	Applied Veterinary Medicine: Advanced Preventive Medicine	2
<b>Core credit hours (Core clinical rotations)</b>		<b>26</b>
<b>Elective credit hours (Career area of emphasis &amp; elective)</b>		<b>22</b>
<b>Year 4 Credit hours</b>		<b>48</b>
<b>TOTAL CREDIT HOURS IN PROGRAM</b>		<b>166</b>
<b>Total CORE credit hours in program</b>		<b>124 (75%)</b>
<b>Total ELECTIVE credit hours in program</b>		<b>42 (25%)</b>

Overview of DVM Professional Program														
YEAR SEMESTER	ONE			TWO			THREE			FOUR			SP	
	AU	SP	May	SU	AU	SP	May	SU	AU	SP	May	SU		AU
Anatomy	6520 6530	6521												
Pre-clinical sciences	6540 6525 6641	6550.01 6550.02 6561			6565 6610.01									
Preventive & population medicine	6510				6646					6611				
Professional development	6614.01	6614.02			6614.03	6614.04				6614.05	6614.06			
Body systems courses	6618	6607			6603 6602 6604 6605	6609 6600 6601 6606								
Clinical reasoning & decision-making		6570.01			6570.02					6570.03				
Clinical sciences										7612 7613 7562 7563 7564				
Clinical techniques laboratories										7615.01 7615.02 7616 7617 6610.02	7615.01* 7615.02* 7616* 7617* 6610.02*			
Experiential clinical sciences (2-week clinical rotations) "CAEs"†													7700.01-.25	7700.01-.25
Credit hours for electives	0	2			3	4				1	10		22	

\* Clinical techniques laboratories run both semesters of year 3 but students take each course one time only.

† CAEs = Career Areas of Emphasis

**Summary of “Career Areas of Emphasis” (CAE)  
Fourth Year Veterinary Professional Curriculum**

<b>Fourth year of veterinary professional curriculum</b>		
<b>Activity</b>	<b>Weeks</b>	<b>Percentage of fourth year</b>
Personal time	2	4%
Holiday hospital coverage/vacation	2	4%
Core clinical rotations	26	50%
Area core clinical rotations	14-16	27-31%
Elective clinical rotations	6-8	11-15%

<b>Core clinical rotations (required of all DVM professional students)</b>	
Anesthesia	2 wks
Applied pathology	2 wks
Community practice	2 wks
Farm animal medicine and surgery	2 wks
Large animal field services	2 wks
Equine rotations	4 wks
Small animal emergency	2 wks
Preventive medicine	2 wks
Radiology	2 wks
Shelter medicine and surgery	2 wks
Small animal internal medicine	2 wks
Small animal surgery	2 wks
<b>Total</b>	<b>26 wks</b>

<b>Career area of emphasis (CAEs)</b>	<b>Additional rotations required for CAE</b>
Small animal	Small animal surgery, neurology, ophthalmology, dermatology, cardiology, oncology, small animal internal medicine or community practice, small animal critical care
Mixed animal	Large animal field services or farm animal medicine and surgery; small animal surgery; equine medicine, surgery, field services or critical care; ophthalmology; dermatology; additional specialty rotations in cardiology, oncology, neurology, or theriogenology
Food animal	Farm animal medicine and surgery, large animal field services theriogenology, advanced theriogenology, equine emergency and critical care medicine
Equine	Equine surgery, equine medicine, equine field service, equine emergency and critical care medicine, ophthalmology, theriogenology
Individualized	Personalized educational experiences for students with non-traditional career interests including pathology, laboratory animal medicine, biomedical research, zoo and wildlife animal medicine, avian and exotic animal medicine, poultry, regulatory medicine, and public health

Ohio State University  
College of Veterinary Medicine  
Professional Program Goals

*Graduates of the College of Veterinary Medicine will have:*

***1. A sound medical knowledge base***

- a. Have a broad working knowledge of the scientific concepts, principles, and processes relevant to the current practice of veterinary medicine
- b. Understand the role of scientific inquiry (i.e., research) in the advancement of medical knowledge
- c. Can obtain, evaluate and apply new knowledge in the diagnosis, treatment and prevention of disease

***2. The necessary clinical skills for comprehensive patient diagnosis and management***

- a. Effectively apply basic medical skills in the diagnosis and treatment of patients
- b. Effectively apply basic surgical skills in the treatment of patients
- c. Administer analgesics and anesthesia with appropriate concern for patient welfare
- d. Provide basic emergency treatment and critical care
- e. Provide timely documentation in medical records that is clear, concise, and organized to optimize patient care and minimize errors

***3. Strong professional and interpersonal skills***

- a. Demonstrate good oral and written communication skills with clients, colleagues, team members, and the general public
- b. Interact compassionately with patients and clients
- c. Demonstrate sensitivity to and respect for the emotional attachment of clients to their animals and their financial concerns
- d. Collaborate effectively with colleagues and technical staff to facilitate patient care; give and receive performance feedback in a constructive manner

- e. Recognize and uphold the veterinarian's professional, legal and ethical obligations to animals, animal owners, professional colleagues and society
- f. Understand the importance of sound business and financial management principles to the practice of veterinary medicine

**4. *Effective problem-solving skills***

- a. Are self-motivated learners and critical thinkers
- b. Utilize effective strategies for self-improvement and recognize the need for life-long learning to maintain and improve clinical competence
- c. Utilize information technology to retrieve, manage, and apply biomedical information for the diagnosis and management of individual patients and populations
- d. Recognize their strengths, weaknesses, and limitations; seek help and advice when needed, including case referral where appropriate

**5. *The necessary skills to practice health promotion and disease prevention***

- a. Demonstrate the ability to apply basic disease prevention and health promotion practices to individual patients and populations
- b. Recognize important zoonotic and foreign animal diseases and be able to articulate appropriate diagnostic, prevention, and control strategies
- c. Contribute to improved public health by promoting food safety, food security, and biosecurity practices that reduce the spread of infectious diseases in human and animal populations

-Adopted by the Council on Education, February 1, 2010

Course number	Course Title	Semester	Credit Hours	Course Leader
<b>YEAR ONE (38 core credits)</b>				
6510	Veterinary Preventive Medicine 1: Epidemiology		3	Garabed
6520	Anatomy 1: dog, cat, pig		4	Inpanbutr
6525	Introduction to Diagnostic Imaging		1	Drost
6530	Functional Veterinary Histology		3	Premanandan
6540	Structure and Function of Cells		2	DeWille
6614.01	Professional Development: 1		1	Harcha
6618	Clinical Pathology		4	Wellman
6641	Introduction to Animal Behavior		2	Croney
			<b>Year 1 Semester 1 Total Credit Hours</b>	
			20	
6521	Anatomy 2: horse, cow		5	Masty
6550.01	Comparative Biology of Disease 1: General Pathology and Immunology		3	Krakowka
6550.02	Comparative Biology of Disease 2: Animal Pathogens		3	Krakowka
6607	Musculoskeletal System		3	Bertone/M. Allen
6614.02	Professional Development: 2		1	Harcha
6561	Principles of Veterinary Pharmacology		2	Strauch
6570.01	Introduction to Clinical Medicine		1	C. Allen
Various	Electives		2	
			<b>Year 1 Semester 2 Total Credit Hours</b>	
			20	
			<b>Year One Total Credit Hours</b>	
			40	
<b>YEAR TWO (33 core credits)</b>				
6603	Neurobiology		4	Masty
6602	Urinary System		3	DiBartola
6604	Endocrine System		3	Brooks
6605	Reproductive System		3	Pinto
6646	Veterinary Preventive Medicine 2: Zoonoses		2	Bowman
6570.02	Clinical Medicine Experience		1	C. Allen
6614.03	Professional Development: 3		1	Harcha
Various	Electives		3	
			<b>Year 2 Semester 1 Total Credit Hours</b>	
			20	
6609	Digestive System		4	Johnson
6600	Cardiovascular System		3	Schober
6601	Respiratory System		3	Olson
6606	Integumentary System		3	Hillier
6565	Introduction to Animal Welfare		1	Croney
6610.01	Veterinary Clinical Parasitology		1	Capitini
6614.04	Professional Development: 4		1	Harcha
Various	Electives		4	
			<b>Year 2 Semester 2 Total Credit Hours</b>	
			20	
			<b>Year Two Total Credit Hours</b>	
			40	
<b>YEAR THREE (26 core credits)</b>				
6570.03	Clinical Reasoning and Decision-Making		2	C. Allen
6612	Introduction to Veterinary Ophthalmology		2	Wilkie
7613	Emergency and Critical Care Medicine		2	Guillaumin
7562	Introduction to Anesthesia		1.5	Bednarski
7563	Introduction to Surgery		2	Adin
7564	Clinical Microbiology and Pharmacology of Antimicrobial Agents		1	Daniels
6614.05	Professional Development: 5		1.5	Harcha
7615.01	Small Animal Operative Practice		4	McLoughlin
7615.02	Small Animal Medicine Techniques		1	Chew
7616	Farm Animal Medicine, Diagnostic Techniques, and Procedures		1	Rings
7617	Equine Medicine, Diagnostic Techniques, and Procedures		1	Schmall
6610.02	Applied Veterinary Parasitology		1	Capitini
Various	Electives		1	
			<b>Year 3 Semester 1 Total Credit Hours</b>	
			21	
6611	Veterinary Preventive Medicine 3: foreign animal diseases and food safety		3	Rajala-Schultz
7526	Applied Diagnostic Imaging		2.5	Drost
6614.06	Professional Development: 6 (includes jurisprudence)		1.5	Harcha
7615.01	Small Animal Operative Practice		continued	McLoughlin
7615.02	Small Animal Medicine Techniques		continued	Chew
7616	Farm Animal Medicine, Diagnostic Techniques, and Procedures		continued	Rings
7617	Equine Medicine, Diagnostic Techniques, and Procedures		continued	Schmall
6610.02	Applied Veterinary Parasitology		continued	Capitini
Various	Electives		10	
			<b>Year 3 Semester 2 Total Credit Hours</b>	
			17	
<b>YEAR FOUR (26 credits of CORE rotations: * = core; ^ = pick one; + = pick two)</b>				
7700.01	Applied Veterinary Medicine: Community Practice*		2	Dimick
7700.02	Applied Veterinary Medicine: Shelter Medicine and Surgery*		2	Hill
7700.03	Applied Veterinary Medicine: Small Animal Internal Medicine*		2	Johnson
7700.04	Applied Veterinary Medicine: Small Animal Surgery - Soft Tissue^		2	Dyce
7700.05	Applied Veterinary Medicine: Small Animal Surgery - Orthopedics^		2	Dyce
7700.06	Applied Veterinary Medicine: Farm Animal Medicine and Surgery*		2	Lakritz
7700.07	Applied Veterinary Medicine: Large Animal Ambulatory Services*		2	Welker
7700.08	Applied Veterinary Medicine: Equine Medicine+		2	Kohn
7700.09	Applied Veterinary Medicine: Equine Surgery+		2	Sanstchi ???
7700.10	Applied Veterinary Medicine: Equine Field Service+		2	Schmall
7700.11	Applied Veterinary Medicine: Equine Emergency and Critical Care Medicine+		2	Mudge
7700.12	Applied Veterinary Medicine: Radiology*		2	Zekas
7700.13	Applied Veterinary Medicine: Clinical Anesthesiology*		2	Lerche
7700.14	Applied Veterinary Medicine: Applied Pathology*		2	Russell
7700.15	Applied Veterinary Medicine: Small Animal Critical Care		2	Guillaumin
7700.16	Applied Veterinary Medicine: Small Animal Emergency*		2	Cooper
7700.17	Applied Veterinary Medicine: Veterinary Clinical Ophthalmology		2	Metzler
7700.18	Applied Veterinary Medicine: Dermatology		2	Hillier
7700.19	Applied Veterinary Medicine: Cardiology		2	Bonagura
7700.20	Applied Veterinary Medicine: Small Animal Neurology		2	Da Costa
7700.21	Applied Veterinary Medicine: Small Animal Oncology		2	Couto
7700.22	Applied Veterinary Medicine: Theriogenology		2	Pinto
7700.23	Applied Veterinary Medicine: Advanced Theriogenology		2	Da Silva
7700.24	Applied Veterinary Medicine: Preventive Medicine*		2	Silveira
7700.25	Applied Veterinary Medicine: Advanced Preventive Medicine		2	Silveira ???
			<b>Core credit hours (Core Clinical Rotations)</b>	
			26	
			<b>Elective credit hours (Career Area of Emphasis &amp; Elective)</b>	
			22	
			<b>Year 4 Total Credit Hours</b>	
			48	
<b>TOTAL CREDIT HOURS IN PROGR.</b>				
		<b>166</b>		
<b>Total core credit hours in program</b>		<b>124</b>	<b>75%</b>	
<b>Total elective credit hours in program</b>		<b>42</b>	<b>25%</b>	



Course number	Course title	Credit hours
<b>First Year Curriculum (62 Core Credits)</b>		
<b>Autumn</b>		
VM 510	Principles of epidemiology	4
VM 520	Topographic anatomy (canine)	5
VM 525	Introduction to radiology I	1
VM 530	Microscopic and developmental anatomy I	5
VM 540	Structure and function of cells	5
VM 614.01	Basic life skills	1
VM 641	Animal Behavior	2
<b>Winter</b>		
VM 521	Topographic anatomy (equine)	4
VM 560	Ethics and jurisprudence	2
VM 531	Microscopic and developmental anatomy II	4
VM 550.01	Comparative biology of disease I (≈80% general path 20% immuno)	5
VM 550.02	Comparative biology of disease II (≈30% virol, 40% parasit, 20% bacterio, 10% myco)	5
<b>Spring</b>		
VM 522	Topographic anatomy (food animals)	4
VM 561	Pharmacology I	3
VM 603	Neurobiology	6
VM 604	Endocrine system	5
VM 526	Introduction to radiology II	1
<b>Second year Curriculum (58 Core Credits)</b>		
<b>Autumn</b>		
VM 600	Cardiovascular system	6
VM 601	Respiratory system	5
VM 614.02	Career strategies	1
VM 618	Hemic-Lymphatic system	5
VM 646	Population medicine	2
<b>Winter</b>		
VM 602	Urinary system	5
VM 607	Musculoskeletal system	6
VM 609	Digestive system	6
VM 613	Fluid therapy	1
VM 614.03	Leadership success I	1
<b>Spring</b>		
VM 562	Introduction to anesthesiology	2
VM 563	Introduction to surgery	3
VM 605	Reproductive system	5
VM 606	Integumentary system	5
VM 608	Principles of non-mammalian species	2
VM 610	Parasite control	2
VM 614.04	Communications I	1
<b>Third Year Curriculum (24 Core Credits)</b>		
<b>Autumn</b>		
VM 612	Introduction to veterinary ophthalmology	3
VM 614.05	Career development/business management	2
VM 615.01 & VM 615.02	Small animal operative practice and Small animal diagnostic medicine techniques	4-1
VM 616 & VM 617	Food animal medicine & techniques and diagnostic procedures and basic equine medical & surgical procedures	3-1
<b>Winter</b>		
VM 564	Pharmacology II	3
VM 611	Veterinary Preventive Medicine	4
VM 614.06	Practice success	1
VM 700.21	Plenary Week	1§
<b>Fourth Year Curriculum (72 Core Credits)</b>		
<b>Clinics I</b>		
VM 700.03	Small animal surgery	6
VM 700.07	Radiology	3
VM 700.09	Anesthesiology	4
VM 700.11	Small animal emergency & critical care	6
VM 700.14	Applied pathology	3
Various	Selective clinical rotations	
<b>Clinics II</b>		
VM 700.02	Small animal medicine	2
VM 700.05	Equine medicine & surgery	6
VM 700.12	Ophthalmology	2
VM 700.15	Dermatology	2
VM 700.16	Equine emergency & critical care	3
VM 700.19	Small animal cardiology	2
VM 700.20	Small animal neurology	2
VM 700.22	Small animal oncology	2
Various	Selective clinical rotations	
<b>Clinics III</b>		
VM 700.01	Community practice	3
VM 700.04	Food animal medicine & surgery	6
VM 700.06	Equine field services	3
VM 700.08 §	Preventive medicine	5
VM 700.10	Large animal field services	3
VM 700.17	Shelter medicine & surgery	3
Various	Selective clinical rotations	
<b>Elective Quarter</b>		
Various		4

§ Graded S/U

	FALL 2012 FALL SEMESTER 2012	WINTER 2013 SPRING SEMESTER 2013 YEAR 2013
YEAR 2012 VME I (Class of 2016)	6510 Vet Prev Med 6520 Anatomy 1: dog, cat, pig 6525 Intro to diag imaging 6530 Func Vet Histol 6540 Struc Func Cells 6614.01 Prof Dev 1 <b>6618 Clin Pathol</b> 6641 Intro Anim Behavior	6521 Anatomy 2: horse, cow 6550.01 Comp Bio Dz 1 6550.02 Comp Bio Dz 2 <b>6607 Musculoskeletal Sys</b> 6614.02 Prof Dev 2 6561 Vet Pharm 6570.01 Intro Clin Med
VME II (Class of 2015)	600 Cardio Sys 601 Resp Sys 614.02 Career Strat <b>618 Hemic-lymphatic Sys</b> 646 Pop Med	602 Urinary Sys <b>607 Musculoskeletal Sys</b> 609 Digestive Sys 613 Fluid Therapy 614.03 Leadership Success 1
VME III (Class of 2014)		
VME IV (Class of 2013)		

SPRING 2013

SUMMER 2013

562 Intro Anesth  
563 Intro Surg  
605 Repro Sys  
606 Integumentary Sys  
608 Non-mammalian  
610 Parasite Control  
614.04 Communications I

# Doctor of Veterinary Medicine Curriculum

The veterinary medicine curriculum is a four-year curriculum, with the first two years spent primarily in didactic work and the last two years spent primarily in clinical experiences. All courses listed are only offered through the College of Veterinary Medicine and are open exclusively to veterinary students. (Curriculum is subject to change.)

## First Year

Autumn	Winter	Spring
Canine Topographic Anatomy I Intro to Histology I Principles of Epidemiology Intro to Radiology I Cell Biology Basic Life Skills	Equine Topographic Anatomy Histology II Comparative Biology of Disease I Comparative Biology of Disease II Ethics and Jurisprudence I	Food Animal Topographic Anatomy Pharmacology I Neurobiology Endocrine System Radiology II Electives

## Second Year

Autumn	Winter	Spring
Cardiology Respiratory System Hemic-Lymphatic Population Medicine Career Strategies Electives	Urinary System Musculoskeletal System Digestive System Fluid Therapy Leadership Success Electives	Intro to Anesthesiology Intro to Surgery Reproductive System Integumentary System Veterinary Parasitology Principles of Non-Mammalian Species Communications Electives

## Third Year

Intro to Veterinary Ophthalmology Equine Medical Techniques Food Animal Medical Techniques Small Animal Surgical and Medical Techniques Career Development	Veterinary Pharmacology II Preventive Medicine Equine Medical Techniques Food Animal Medical Techniques Small Animal Surgical and Medical Techniques Practice Success Electives	Clinical Training
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## Fourth Year

**Clinical Rotations:** Students rotate through each specialty area including: Small animal internal medicine, oncology, neurology, cardiology, radiology, equine field services, large animal field service, food animal medicine and surgery, preventive medicine, community practice, anesthesia, small animal surgery, small animal emergency and critical care, equine emergency, equine medicine and surgery, pathology, ophthalmology, dermatology, and shelter medicine and surgery.

**Electives:** Students have an opportunity to choose from a variety of electives offered through the college and off campus.

Note: The information contained in this insert was current at the time of publication but is subject to change without notice.