

Pre-Clinical Curriculum (Yrs 1-3)

2017-2018



Term	Number	Course	Credit Hrs
Fall Year 1	VMD 801	Application-Based Learning Exercise (ABLE) I	1
2021	VMD 811	Infection & Immunity II (Bacteriology/Mycology)	3
Freshman	VMD 812	One Health, Wellness, & Ethics I	1
Total hrs: 19	VMD 813	Infection & Immunity I (Immunology)	2
	VMD 814	Clinical Correlations & Ethics	1
	VMD 821	Veterinary Anatomy I (All SA)	4
	VMD 823	Physiology I	4
	VMD 825	Advanced Veterinary Anatomy I	2
	VMD 831	Physical Diagnosis	1
Spring Year 1	VMD 802	ABLE II	2
2021	VMD 815	Infection & Immunity III (Virology)	2
Freshman	VMD 816	Clinical Correlations & Ethics	1
Total hrs: 21	VMD 817	One Health, Wellness, & Ethics II	1
	VMD 822	Veterinary Anatomy II (All LA)	4
	VMD 824	Physiology II	4
	VMD 826	Advanced Veterinary Anatomy II	2
	VMD 833	Epidemiology/Evidence-Based Medicine	2
	VMD 873	Infection & Immunity IV (Parasitology)	3
Fall Year 2	VMD 804	ABLE IV & Clinical Exposure (CE) I	2
2020	VMD 832	Anesthesiology	2
Sophomore	VMD 835	Principles & Practice of Surgery	2
Total hrs: 20	VMD 836	Toxicology	2
	VMD 839	One Health, Wellness, & Ethics III	1
	VMD 851	Urinary System	3
	VMD 861	Pharmacology I	2
	VMD 871	General Pathology	3
	VMD 888	Clinical Pathology	3
Spring Year 2	VMD 805	ABLE V & CE II	2
2020	VMD 842	Alimentary Systems	4
Sophomore	VMD 845	Veterinary Nutrition	2
Total hrs: 18.5-19.5	VMD 853	Endocrine System	2
	VMD 856	Ophthalmology	2
	VMD 857	Nervous System	3
	VMD 858	One Health, Wellness, & Ethics IV	1
	VMD 862	Advanced Veterinary Pharmacology I	0.5
	VMD 868	Introduction to Animal Behavior	1
	*	Elective I	1 or 2
Fall Year 3	VMD 800	One Health, Wellness, & Ethics V	1
2019	VMD 806	ABLE VI & CE III	2
Junior	VMD 837	Zoonoses & Food Hygiene	2
Total hrs: 19.5-20.5	VMD 841	Reproductive System	3
	VMD 846	Multispecies Medicine	2
	VMD 852	Cardiovascular System	2
	VMD 854	Respiratory System	3
	VMD 855	Radiology	3
	VMD 865#	Advanced Veterinary Pharmacology II	0.5
	*	Elective II	1 or 2
Spring Year 3	VMD 840	Integumentary System (Dermatology)	3
2019	VMD 843	Musculoskeletal System I (Small Animal)	3
Junior	VMD 844	Musculoskeletal System II (Large Animal)	3
Total hrs: 18-22	VMD 864	Infectious Diseases	2
	VMD 874	Oncology	2
	VMD 876	One Health, Wellness, & Ethics VI	1
	*	Elective III	1 to 3
	*	Elective IV	1 to 3
	VMD 890	Transition & Accreditation Seminars	2

*Multiple possibilities; # VM865 will not be offered Fall 2017 as VM 862 (2) has already been completed. First offering Fall of 2018.

Effective Summer Semester 2017 (revised 7/05/17 ck)

Clinical Curriculum (Yr 4)

2017–2018



Number	Course	Credit Hours	
Required Core Rotations/Courses—29–33 credit hours (weeks) required for all students (including externships)			
VMD 838	Clinical Rotation in Pathology		3
VMD 847	Clinical Rotation in Radiology		3
VMD 870*	Clinical Rotation in Anesthesiology		2–3
VMD 881	Clinical Rotation in Small Animal Clinical Sciences I (Small Animal Medicine)		3
VMD 882*	Clinical Rotation in Small Animal Clinical Sciences II (Community Practice)		2–3
VMD 883*	Clinical Rotation in Small Animal Clinical Sciences III (Small Animal Soft Tissue Surgery)		2–3
VMD 891*	Clinical Rotation in Large Animal Clinical Sciences I (Equine Medicine)		2–3
VMD 892*	Clinical Rotation in Large Animal Clinical Sciences II (Farm Animal Medicine & Surgery)		2–3
VMD 893*	Clinical Rotation in Farm Animal Field Services		2–3
VMD 896	Clinical Rotation in Equine Field Services		2–3
VMD 898	Externship (Off campus veterinary educational experience)		2–3
VMD 899	Externship (Off campus veterinary educational experience)		2–8
Elective Rotations/Courses—15–21 credit hours (weeks) selected by the student			
VMD 850*	Avian and Zoological Medicine & Surgery	Service Elective	2-3
VMD 859*	Veterinary Cardiology	Service Elective	2-3
VMD 860	Veterinary Dermatology	Service Elective	2-3
VMD 863*	Veterinary Oncology	Service Elective	2-3
VMD 866*	Veterinary Ophthalmology	Service Elective	2-3
VMD 869*	Veterinary Neurology	Service Elective	2-3
VMD 872*	Small Animal Orthopedic Surgery and Physical Rehabilitation	Service Elective	2-3
VMD 880*	Small Animal Emergency Medicine	Service Elective	2-3
VMD 894*	Equine Surgery	Service Elective	2-3
VMD 895*	Large Animal Emergency Medicine and Critical Care	Service Elective	2-3
VMD 803*	Advanced Pathology		2–3
VMD 807*	Advanced Veterinary Anesthesiology		2–3
VMD 808	Advanced Diagnostic Imaging		2–3
VMD 809*	Advanced Small Animal Medicine		2–3
VMD 810*	Advanced Veterinary Dermatology		2–3
VMD 818	Shelter Medicine		2–3
VMD 834*	Clinical Rotation in Shelter Spay/Neuter		2–3
VMD 875	Veterinary Ultrasonography		2–3
VMD 876*	Small Animal Nutrition & Animal Behavior		2–3
VMD 884*	Zoological Medicine		2–3
VMD 885	Clinical Rotation in Laboratory Animal Medicine (in house)		2–3
VMD 886*	Clinical Rotation in Theriogenology		2–3
VMD 848	Clinical Rotation in Bovine Production Medicine (2 rotations per year)		2
VMD 889	Clinical Rotation in Equine Performance Medicine & Rehabilitation		2–3
VMD 827	Beef Cow Calf Summer Institute Elective (VA Tech–Consent of BCCI faculty required)		2
VMD 830*	Clinical Rotation in Swine Medicine Production (Iowa State–Consent of SMEC faculty required)		2-6
VMD 878*	Elective Clinical Rotation I (Special topics in veterinary medicine)		1–3
VMD 879*	Elective Clinical Rotation II (Special topics in veterinary medicine)		1–3
VMD 878	Special Topics: Clinical Rotation in Small Animal Dentistry (limited availability)		2
VMD 878	Special Topics: Clinical Rotation in Equine Podiatry and Farrier Sciences (limited availability)		2
VMD 878	Special Topics: Small Ruminant and Camelid Health (limited availability)		2
Vacation	4 weeks: An initial 2-week block and then 1- or 2-week blocks selected by the student		0

Year 4 includes summer, fall, and spring semesters.

MINIMUM OF 165 CREDIT HOURS REQUIRED FOR GRADUATION

Effective Summer Semester 2017 (revised 7/05/17 ck)

Application-Based Learning Exercises (A.B.L.E.)



PURPOSE

The UTCVM curriculum includes six individual weeks of ABLEs during semesters 1–5. The goals of these sessions include increasing student responsibility for learning, integrating basic and clinical information, developing increased problem solving and student communication skills, and providing the opportunity for students to find information on their own from a variety of sources. It is generally accepted that these skills are essential for success in both clinical practice and research. Material incorporated in ABLEs will relate *backward and forward* in the curriculum, becoming reinforcement of previously acquired knowledge, and first-time exposure to some new information. Activities will develop foundational knowledge in non-technical skills, including POMR, SOAPs, client communication, and clinical research. These 6 weeks represent a highly student-centered, student-driven portion of our current didactic teaching.

A.B.L.E. SESSIONS

Each ABLE session is focused on a clinical case or other clinical situation. Students are assigned to groups of 6–7, with one faculty member functioning as their facilitator. Faculty provide guidance and direction, but not factual information, and thus need not be content experts themselves. Students are expected to identify the limits of their own knowledge and seek out the majority of new information on their own or in small groups. After formulation of initial learning objectives, students request and are given additional historical and physical exam findings and results of further ancillary diagnostic tests that were performed. They then refine and prioritize learning issues based on this information. From this point on, they decide how to proceed, making use of a wide variety of supporting materials, such as additional laboratory data, radiographs, results of other diagnostic tests, anatomic specimens, printed materials (journal articles, texts, etc.), and computerized or other multimedia materials. Information and data should be pursued by students in a sequential manner, allowing the case to develop naturally. Cases are designed so that a logical ending point is reached by students at the end of the week. This need not always be complete resolution of all clinical problems.

Most ABLE periods will begin in the late morning on a Monday, allowing 8:00–10:00 AM to be used for exams in didactic courses. Daily *required* meetings between students and their facilitators will be scheduled, totaling about 2–4 hours of each day. The group has some say in setting these times, providing them a sense of control over the pace of the learning process. Some groups may decide to meet twice a day (morning session followed by a brief late afternoon session). The role of facilitators in these sessions is very different from that in typical didactic teaching situations. The faculty will help maintain group dynamics, help students identify new learning issues, help focus and summarize discussions, and guide students to sources of information. Facilitators are not responsible for teaching new material, nor is it expected that facilitators necessarily be experts in any aspect of the case being discussed. During the week, class-wide meetings with other faculty members *may be* scheduled if this is deemed desirable (an example might be for a physiology demonstration). A final 8:00–10:00 AM session on the following Monday may be used to bring all students and facilitators together to summarize the case and to answer any lingering questions. This time may also be used for appropriate student assessment activities. Group hands-on learning activities may be scheduled within certain case examples, as appropriate.

Students will be actively evaluated by facilitators during the ABLE sessions and a final grade assigned. The format and emphasis of all assessment activities will be consistent with the goals of facilitated learning, which are very different than in the didactic parts of the curriculum. The evaluation process is primarily subjective (student participation, preparation, completion of assignments, answers to verbal questioning, etc.). *Self-assessment and peer evaluation* have been shown to be important components of the overall assessment plan for small group learning situations.

O.V.M.E. - August 2002

Clinical Exposure (CE)

VMD 804, 805, 806



PURPOSE

The UTCVM curriculum includes three individual weeks of CE in conjunction with A.B.L.E. studies during semesters 3-5. The goals of these sessions is similar to ABLES but extends the learning environment to include a greater responsibility for experiential learning in the clinical environment. Learning objectives include increasing student responsibility for learning, integrating basic and clinical information into case management, developing increased problem solving, student communication, organizational and practice skills. Students will have the opportunity to practice complete history taking and physical exam skills. The student will practice the behaviors of professionalism including teamwork, patient responsibility, and confidentiality. They will learn the organization of clinical teaching within the hospital, rounds participation, medical records management, writing SOAPs as well as be able to practice preliminary technical skills.

The CE Experience

The CE experience is organized in the same fashion as standard rotations. When possible, students should attend orientation, or meet with the service technicians. Students are to be paired with a senior student and participate in each case evaluation and workup (history, physical exam, diagnostic planning, etc.). They should fully participate in clinical rounds discussion while practicing the integration of didactic knowledge with clinical case discussions. Topic rounds are available on some services but many services reinforce learning through case rounds. Clinical service organization is dependent upon the specialty. Review of the department handbook and service rotation learning objectives should be completed prior to arrival to each service.

Students are expected to arrive on clinical rotations beginning Monday at 8:00 a.m., or following the conclusion of morning didactic courses or exams. CE experience continues through the completion of Friday afternoon or evening shift/duties. This may require work into the early morning hours on Saturday for overnight services. Students may continue to participate and follow cases on Saturday and Sunday, at will. Unlike senior clinical duties, weekend duty is not required during Clinical Exposure. The weekend should be used to review course-work in preparation for didactic courses and exams that may be scheduled the following week.

CE grading is bases on active participation, attendance, professionalism and clinical development noted during each one-week period. Grading is S/U.