

Health Professions Academic Preparation

Veterinary Medicine

An undergraduate education provides students with the opportunity to grow personally and intellectually; allowing them the time and resources to discover a breadth of new ideas and topics as well as to build and to explore in depth their own interests and passions. Therefore, students should seek a broad education during their undergraduate years. There is no required major for entrance to veterinary school. **The following courses represent what can be taken at UTSA to fulfill the prerequisites for entrance to Texas A&M University's College of Veterinary Medicine's Doctor of Veterinary Medicine (DVM) program.** Please note that all requirements are subject to approval by the College of Veterinary Medicine and are subject to change. Further, because there is some variation in requirements to other veterinary schools, students are advised to consult individual programs for specific and most current information.

Required Areas of Study	UTSA Course	Grade/Sem	Prerequisites/Corequisites
Non-Science Category-Must receive C or better			
English Composition (3 hrs lecture)	WRC 1013		
Literature (3 hrs lecture)	Any 3-hour course with literature in title		Generally, completion of both WRC 1013 and WRC 1023; varies by course
Speech Communication (3 hrs lecture)	COM 2113		COM 1043 or 1053 or consent of instructor
Technical Writing (3 hrs lecture)	ENG 2413		WRC 1013 and WRC 1023
Chemical/Physical Sciences and Mathematics Category-Must receive C or better			
Inorganic Chemistry (6 hrs lecture; 2 hrs lab) <i>NOTE: Although UTSA chemistry labs are worth two hours of credit each, Texas A&M requires that students take matching labs to both General Chemistry I and II.</i>	¹ CHE 1103 or ² CHE 1143		¹ Passing grade on Chemistry Placement Exam or C or better in CHE 1073 and completion of or concurrent enrollment in MAT 1073; ² Grade of "B" or higher in MAT 1073 and CHE 1073 or score of 60% or higher on chemistry placement exam
	CHE 1122 Lab and CHE 1120 Lab Lecture		Completion of or concurrent enrollment in CHE 1103 or CHE 1143
	¹ CHE 1113 or ² CHE 1153		¹ CHE 1103; ² "C" or better in CHE 1143 or "B" or better in CHE 1103 with instructor consent
	CHE 1132 Lab and CHE 1130 Lab Lecture		CHE 1122 and completion of or concurrent enrollment in CHE 1113 or CHE 1153
<i>Continued on Reverse</i>			

Organic Chemistry (6 hrs lecture; 2 hrs lab) <i>NOTES: Although UTSA chemistry labs are worth two hours of credit each, Texas A&M requires that students take matching labs to both Organic Chemistry I and II.</i> <i>CHE 2603 was formerly CHE 2604; CHE 3643 was formerly CHE 2623. CHE 3652 was formerly CHE 2632; CHE 3650 was formerly CHE 2630.</i>	CHE 2603		CHE 1113 or CHE 1153 <i>and</i> CHE 1132
	CHE 2612 Lab and CHE 2610 Lab Lecture		Completion of or concurrent enrollment in CHE 2603
	CHE 3643		CHE 2603 and completion of or concurrent enrollment in CHE 2612
	CHE 3652 Lab and CHE 3650 Lab lecture		CHE 2603 and CHE 2612
Biochemistry (6 lecture hrs) <i>NOTE: Two lectures are necessary to fulfill this requirement; laboratory work does not apply.</i>	BIO 3513		CHE 2603 and CHE 2612
	BIO 3813		BIO 2313
Calculus or Statistics (3 hrs lecture) <i>NOTE: MAT 1193 was formerly MAT 1194.</i>	MAT 1214, or STA 3513		MAT 1093 or satisfactory score on placement exam (for MAT 1214); MAT 1224 and STA 3003 (for STA 3513)
Physics (6 hrs lecture; 2 hrs lab)	PHY 1603		MAT 1023 (not recommended for pre-med students), MAT 1073 or higher
	PHY 1611 Lab		Completion of or concurrent enrollment in PHY 1603
	PHY 1623		PHY 1603
	PHY 1631 Lab		PHY 1611 and completion of or concurrent enrollment in PHY 1623
Life Sciences Category-Must receive C or better			
General Biology (3 hrs lecture; 1 hr lab)	BIO 1404		MAT 1023 (not recommended for pre-med students), MAT 1073 or higher; CHE 1073 or higher also recommended by UHPO
	BIO 1122 Lab		Completion of or concurrent enrollment in BIO 1404
General Microbiology (3 hrs lecture; 1 hr lab)	BIO 3713		BIO 1122 and BIO 1413
	BIO 3722 Lab		BIO 1122 and BIO 1413
Genetics (3 hrs lecture)	BIO 2313		BIO 1413 and completion of or concurrent enrollment in CHE 1103 <i>and</i> MAT 1193 or STA 1053 (STA 1403 for Biology majors)
	BIO 2322 Lab and BIO 2320 Lab Lecture		BIO 1122, BIO 1413, and CHE 1103
Animal Nutrition (3 hrs lecture) <i>NOTE: Check with Texas A&M for courses at other Texas institutions that will fulfill requirement: http://vetmed.tamu.edu/dvm/future/animal-science-requirements.</i>	Not offered at UTSA		
General Animal Science (3 hrs lecture) <i>NOTE: Please see note above.</i>	Not offered at UTSA		

Please note that the previously listed UTSA courses and prerequisites are for students following the 2010-2012 Undergraduate Catalog. Students following another undergraduate catalog should consult an advisor with any questions about course numbering.

Foundation Courses: For students who are not prepared to go directly into the required courses, it will be necessary to enroll first in foundation courses such as basic chemistry and an appropriate mathematics course. It may also be necessary to take the mathematics and chemistry placement tests to determine proficiency. For additional information, please seek the counsel of an advisor at the beginning of your studies.

Advanced Biology Electives Relevant to Veterinary Education: The following list of upper division biology courses encompasses subject areas that will be encountered in the veterinary school curriculum. Although the list is not exhaustive, early exposure to these and other courses at the undergraduate level can provide beneficial preparation for success in veterinary school.

BIO 3013 Introductory Pathology	BIO 3163 Histology & Cytology
BIO 3123 Comparative Anatomy of Vertebrates	BIO 3213 Animal Behavior
BIO 3413 Advanced Physiology	BIO 3433 Neurobiology
BIO 3623 Neuropsychopharmacology	BIO 3713 Microbiology
BIO 3813 Cellular Biology	BIO 3913 Molecular Biology
BIO 4053 Wildlife Biology	BIO 4453 Endocrinology
BIO 4723 Virology	BIO 4743 Immunology
BIO 4763 Parasitology	

In addition, taking some business coursework in areas such as management, finance, accounting, and similar courses is encouraged.

Timeline: Students who enter their undergraduate studies with the intention of beginning a veterinary program just after graduation should plan to complete the pre-veterinary course work during the spring semester of their junior year. Such a schedule would permit a student to complete his or her degree requirements prior to graduation in May of the following year. It is not unusual, however, that a student will decide later in their academic career to pursue veterinary medicine. Arriving at the decision later does not necessarily place a student at a disadvantage. It will, however, require a student to postpone the application to veterinary school until prerequisite course requirements are fulfilled. The veterinary medicine school application cycle, from application to matriculation, takes approximately fourteen months, so advance planning is essential.

Application Process: Texas A&M University has the only DVM program in Texas. When considering an applicant for admission, the Texas A&M College of Veterinary Medicine calculates three GPAs: the overall GPA, the science GPA, and the GPA for the last 45 hours. Students must have a minimum grade point average (GPA) of 2.90 overall or a 3.10 GPA for the last 45 semester hours in order to apply for admission to the Texas A&M University DVM program. However, meeting these minimal academic standards does not make the applicant competitive nor qualify for an interview.

Students must apply to this program through the **Texas Medical and Dental Schools Application Service** (TMDSAS). Detailed information on the application process can be found at their website: www.utsystem.edu/tmdsas. The application becomes available May 2 and the deadline to apply is September 30. It is the student's responsibility to ensure that TMDSAS receives all transcripts, fees, and other required documentation. Unlike the Medical and Dental School application cycle where applications are reviewed as received, Texas A&M does not start reviewing applications until after the September 30 deadline. However to ensure that materials are received and processed in a timely manner, students should submit their materials to TMDSAS at least two weeks before the application deadline. Texas A&M typically begin interviews in December/January. Admissions decisions are announced in mid-March. Matriculation is in August.

To apply to out-of state veterinary schools, students should utilize the Veterinary Medical College Application Service (VMCAS). Detailed information about the VMCAS application can be found on the website of the Association of American Veterinary Medical Colleges (AAVMC): <http://aavmc.org/vmcas/vmcas.htm>.

Admissions Tests: The Graduate Record Examination (GRE) is a standardized exam required for admission to the Texas A&M Veterinary Medicine Program. However, a few other programs will accept the Medical College Admission Test (MCAT). Information on both of these exams is provided below.

The GRE is the required admissions exam for most DVM programs across the country, including the program at Texas A&M University. Computer administrations of the GRE are available almost daily. The GRE measures verbal reasoning, quantitative reasoning, critical thinking, and analytical writing skills. An examinee can register for the GRE online, by phone, or by mail and are limited to taking the GRE General Test once per calendar month and no more than five times in any 12-month period. Complete registration details and other information about the GRE are available at: <http://www.ets.org>.

Although the GRE is required by most DVM programs, some programs will also accept the MCAT. The MCAT is offered between January and September each year in a computer-based exam format. As it takes approximately 30 days for official exam results to become available, it is important that students plan to take the MCAT at least one month or more prior to the application deadlines of the schools to which they are applying. Disciplined review and preparation for the exam should be undertaken at least six months in advance of the test date. The MCAT is comprised of four sections: Biological Sciences; Physical Sciences; Verbal Reasoning; and Writing Sample. The scoring for the first three sections is on a 1-15 scale. Ten or better is considered a strong score. The Writing Sample section is assigned a letter value of J to T, T being the highest possible score. The total score for all of these sections combined will also be reported. Through the AAMC website (<http://aamc.org/students/mcat/start.htm>), students can find detailed information about the exam and can register to take the exam.

Evaluations: Evaluations are an essential part of the application. Because selection committees depend heavily on evaluations to gain insight into applicants' personal strengths, weaknesses, and accomplishments, students should be sure to request evaluations from individuals, such as professors, work supervisors, and volunteer supervisors, who know them well. **One evaluation must be completed by veterinarian.** Evaluations from family members or other individuals whom students know only on a personal level are inappropriate.

The UHPO can both collect and send evaluations on a student's behalf. To authorize the UHPO to do this, a student must meet with an advisor for a Pre-Committee Assessment appointment and sign a release form. The release form also indicates if a student will waive their right of access to the letters. We recommend students to do so. Students using this service should provide all referees with copies of their release form and notify referees that evaluations must be signed, printed on professional letterhead, and sent directly to the UHPO via campus or postal mail.

UTSA Health Professions Committee Letter of Evaluation: Although Texas A&M University College of Veterinary Medicine does *not* utilize committee letters, some colleges of veterinary medicine may see these as a very valuable part of a student's evaluation packet. The committee letter of evaluation is a form of support and advocacy which is meant to capture aspects of a student's life, personality, and background that are not found in other parts of their application. It will be written by an advisor, reviewed by other committee members, and submitted along with other letters of evaluation by the UHPO. To request a committee letter of evaluation, a student must first meet with an advisor during a Pre-Committee Assessment to discuss his or her pre-veterinary preparation and to learn about all requirements for the committee process. Committee interviews,

one of the requirements of the committee process, are only offered between March 1 and September 1 each year.

Experience with Animals/Community Service/Volunteering/Shadowing: An integral part of preparation for veterinary school entails knowledge of and experience in working with animals, such as at a clinic, farm/ranch, home, research laboratory, kennel, and/or animal shelter. These activities serve to familiarize prospective veterinarians with the realities of everyday clinical practice as well as to underscore the role of veterinary medicine in relation to broader community level concerns and issues.

In order to qualify for an interview with the DVM Program at Texas A&M University, a student must complete at least 50 hours of veterinary experience and observation under the direct supervision of a licensed veterinarian. As other DVM programs may have a similar requirement, it is important that students refer directly to all schools to which they plan to apply for more information.

Involvement in other non-veterinary community service and volunteer experiences are also important in your personal and professional development. A list of volunteer opportunities is available on the UHPO website (www.utsa.edu/healthprofessions), and we will continue to update it with additional possibilities. We do not, however, have a list available for shadowing experiences. Students must exercise personal initiative and develop relationships that would allow them to have this direct contact with a veterinarian in everyday clinical practice.

Personal Statement: The UHPO staff will read and provide feedback to students regarding their personal statements given sufficient time, preferably two weeks prior to when comments are needed. We also recommend that students visit The Writing Center at UTSA (www.utsa.edu/twc) for further review.

Interviews: The UHPO can offer some advice as students prepare for interviews and, after interviews, would like to debrief with students about their impressions. The University Career Center also facilitates interview workshops and conducts mock interviews to provide students with feedback. For more information about their services contact them at the Main Campus [UC 2.02.04 or (210) 458-4589] or Downtown Campus [BV 1.304 or (210) 458-2910].

Additional Resources: The UHPO keeps and maintains resources that are available to students in our office and on our website. These include books, journals, handouts, and other resources. In addition, students should consult the websites of veterinary schools, the Association of American Veterinary Medical Colleges (www.aavmc.org), American Veterinary Medical Association (www.avma.org), the Texas Medical and Dental Schools Application Service (www.utsystem.edu/tmdsas), and the Veterinary Medical College Application Service [VMCAS] (<http://www.aavmc.org/vmcas/vmcas.htm>). To learn more about Texas A&M's Veterinary Medicine Program, visit their website (<http://vetmed.tamu.edu/dvm/future>) or contact them at (979)845-5038.

Health Professions Advising: The UHPO provides advising and support to students interested in pursuing careers in the health professions, including veterinary medicine. This consists of academic preparation assistance as well as information about health careers, application procedures, and entrance exams for undergraduates, post-baccalaureate students, non-degree seeking students, and alumni. Students are encouraged to seek advice and consult with the UHPO advising staff early in their college career. For more information about our appointment and walk-in schedules and our other services, please contact us:

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