



College of Veterinary Medicine

*Educating Protectors of Animal and Human
Health Since 1946*



2011-2012 **ADMISSION GUIDE**

Visit our Website: www.cvm.missouri.edu

Revised June 2011

Overview of Veterinary Medical Admissions and Education

There is only one college of veterinary medicine in Missouri, one of 28 in the nation. 120 students will be accepted to the class entering the MU College of Veterinary Medicine in the fall of 2011 out of more than 900 applicants. The selection process is based solely on individual merit as demonstrated in both the classroom and nonacademic areas.

A minimum of more than two years of full-time undergraduate studies is required to apply (at least 60 semester credit hours). If accepted, a veterinary medical student must successfully complete four years of professional courses (at least 160 semester credit hours) to obtain the Doctor of Veterinary Medicine (DVM) degree. Optional advanced training programs are available after attaining a DVM degree. These advanced training programs include graduate programs leading to an MS, MPH or PhD degree, or clinical training programs leading to board certification as a specialist in one of 20 recognized veterinary medical specialties.

A career in veterinary medicine is challenging and exciting. It is a full-time commitment, a way of living, and not simply a way of making a living.

National and state licensing examinations are required to obtain a license to practice in most states. Further information can be found at the National Board of Veterinary Medical Examiners (NBVME; www.nbvme.org) and the American Association of Veterinary State Boards (AAVSB; www.aavsb.org) websites.

Purpose of this Pamphlet

The information in this pamphlet will assist you in preparing to apply to the MU College of Veterinary Medicine. If you still have questions after reading this pamphlet thoroughly, please address them to:

Associate Dean for Academic Affairs
College of Veterinary Medicine
University of Missouri
Columbia, Missouri 65211
Phone: (573) 884-3341

Preparation in High School

Preparation for application to the MU College of Veterinary Medicine is best begun while in high school. The selection process for entrance evaluates academic and nonacademic criteria.

Academic Preparation:

No fixed requirements exist for the high school curriculum. However, a high school student is generally advised to take four years of mathematics, four years of English (grammar and composition), two years of biology, and as much chemistry and physics as possible. Basic computer skills are useful. Speech, debating, or drama will also prepare the student for communication skills expected of veterinarians.

Nonacademic Preparation:

Involvement in extracurricular activities, such as school clubs, athletics, band, FFA, 4-H, Boy Scouts, Girl Scouts, church activities, and any other organized activity requiring the development of teamwork, interpersonal skills, and diversity are encouraged and scored for selection purposes.

Applicants are expected to have had experiences with a variety of animals. Some of this experience must be while observing veterinarians in an actual veterinary medical practice. Many veterinarians will permit prospective veterinary medical students to spend time observing activities in their practice. High school students considering veterinary medicine as a career are encouraged to seek out such opportunities to see the actual practice of veterinary medicine. Agricultural, biomedical, research, and public health experience is also highly regarded.

The Pre-Veterinary Medicine Scholars and AgScholars Programs

Definition:

These programs guarantee acceptance into the MU College of Veterinary Medicine upon satisfactory completion of undergraduate requirements at the University of Missouri.

Eligibility:

High school seniors and MU freshmen with an ACT composite score of at least 30 or an equivalent SAT score are eligible to apply for the PVM Scholars Program. The required minimum ACT score for AgScholars is 27.

How to Apply:

Application forms will be available in the Office of Academic Affairs in the College of Veterinary Medicine. Eligible applicants will be invited for an interview. The application deadlines are April 1 for high school seniors and Sept. 15 for MU freshman.

Veterinary Medical Mentors:

Students qualifying for the Scholars Programs will be assigned a faculty mentor in the College of Veterinary Medicine. Whenever possible, Scholars Program students will be invited to participate in veterinary medical research projects and other appropriate events in the College of Veterinary Medicine.

BS in Animal Sciences and DVM Degrees

Students who complete prescribed undergraduate courses in the MU College of Agriculture, Food and Natural Resources, Division of Animal Sciences, and are then successful in being selected to a class in the MU College of Veterinary Medicine will receive elective credits concurrently for up to 32 hours of professional degree courses. This enables qualifying students to receive a BS degree with three or four years of undergraduate work and two years of professional studies.

For more information, contact:

Dr. George W. Jesse
S110 Animal Science
Center
University of Missouri
Columbia, MO 65211
Phone: (573) 882-2644

Associate Dean for
Academic Affairs
W-203 Veterinary Medicine
University of Missouri
Columbia, MO 65211
Phone: (573) 884-6774

Selection Process:

Selection is based on meeting the academic eligibility requirements and attaining a satisfactory score from the interview. Eligibility is not limited to Missouri residents; however, the number of nonresident students who can be accepted may be limited. U.S. citizenship or permanent residency is required.

2010—2011 Applicant Statistics		
Applicant Demographics	Qualified* Missouri Residents	Qualified* Non-Missouri Residents
Total	122	780
Men	26	127
Women	96	653
Overall Grade Point Average	3.51	3.50
*Total applicants were 916		

2010—2011 Applicant Statistics (continued)	
2011 Accepted Applicants Profile	Total of 119
Men	23
Women	96
Average Age	23
Average ACT	27
Average cum GPA	3.77
Average Last Three Semester GPA	3.78
From Undergraduate Program in Agriculture	46
From Undergraduate Program in Arts and Sciences Background	53
Raised in Farm Environment	27
Raised in Small Town Environment	24
Raised in Urban Environment	34
Raised in Large City Environment	34

Characteristics of the Average Student in the MU College of Veterinary Medicine

2010 Incoming Class Characteristics:

Residency:

Residency status is determined by the MU Residency Office, not by the College of Veterinary Medicine. Questions concerning residency status should be directed to:

Residency Office
University of Missouri
123 Jesse Hall
Columbia, MO 65211
Phone: (573) 882-3852

An agreement exists with Arkansas that may reduce tuition for residents of that state.

The number of nonresident positions is variable based on annual applicant pools. Consideration is only given to U.S. citizens or holders of permanent alien visas.

Preparation in Undergraduate College

Selection of Colleges:

The Admissions Committee accepts credit and grades from any U.S. accredited institution of higher

learning. To ensure proper counseling and support, it is advised that undergraduate work be acquired at an institution with an active pre-veterinary medical club.

Students enrolled in the University of Missouri are not given preference when applying for admission to the College of Veterinary Medicine unless they are participants of the Pre-Veterinary Medicine Scholars or AgScholars Programs.

Undergraduate Majors:

Since some students interested in becoming veterinarians are not accepted into veterinary medical college, students should emphasize a bachelor's degree program rather than pre-veterinary medical studies. A student should enroll in the school/college offering the degree major selected as a career alternative to veterinary medicine. Most pre-veterinary medical students enroll in animal science, biology or biochemistry.

Type and Sequence of Undergraduate Courses:

Students should be guided by the requirements of their degree majors and our pre-veterinary requirements. Catalogs and bulletins usually provide good direction, particularly with regard to required courses in the major. Students should consult their advisors about supporting courses and electives that will strengthen their majors.

Only two courses being used to fulfill course prerequisites may be pending completion in the spring/winter semester prior to matriculation.

The following courses and credit hours must be taken in residence at an accredited institution of higher learning to qualify for admission to the College of Veterinary Medicine.

	<i>Semester* Credit Hours</i>
Composition or courses in communication skills	6
College Algebra or more advanced mathematics.....	3
Biochemistry (requires organic chemistry prerequisite).....	3
Physics (comprehensive course or courses)**	5
Biological Science	10
Social Science and/or Humanistic Studies	10
Electives.....	<u>10</u>
Semester Credit Hours Minimum Total	60

* Multiply quarter credits by 0.67 to convert to semester credits.

**5 hours. in only the first of a companion series in physics will not suffice.

Students should take in-depth courses in these areas:

- a. Inorganic chemistry courses that prepare them for organic chemistry and, finally, biochemistry;

- b. Biology Department courses that may be selected from zoology and botany or as required in foundation courses for a biology major.

NOTE: *Whenever there is doubt as to whether a course will fulfill the requirements to apply, the applicant should contact the Admissions Advisor, MU College of Veterinary Medicine, as soon as possible. If the course is acceptable, the applicant is advised to include a copy of the Associate Dean's response letter with the completed application forms.*

Example Courses at the University of Missouri (MU) That Meet Requirements to Apply to the College of Veterinary Medicine (Not Intended as a Comprehensive Listing):

Biological Sciences	Credit Hours	Example MU Courses That Meet Requirements
Intro. to Biological Systems	5	Biology 1500
General Genetics	4	Biology 2200
Cell Biology	4	Biology 2300
Basic Microbiology	4	M3200
Physical Sciences	Credit Hours	Example MU Courses That Meet Requirements
General/Inorganic Chemistry	5	Chemistry 1310 and 1320
Organic Chemistry	5/3	Chemistry 2050 or 2100
Biochemistry	3	Biochemistry 3630 or higher
College Algebra	3	Mathematics 1100
Physics	5	Physics 1210 and 1220
Non-Science Requirements	Credit Hours	Example MU Courses That Meet Requirements
Composition or Communication	6	Engl 1000, Speech 1200 or Writing Intensive Class
Social Sciences and/or Humanities	10	Economics, History, Political Sciences, Literature, Mythology, Philosophy, Psychology, Sociology, Anthropology
Electives	10	Open

Required Courses Deadline:

The minimum required courses must be completed by the end of the spring semester (spring quarter) of the year for which admission is sought. Very few students are accepted with only minimum requirements. Grades for required courses must be received by MU College of Veterinary Medicine, Office of Academic Affairs, by July 1.

Only two courses being used to fulfill course pre-requisites may be pending completion in the spring/winter semester prior to matriculation. Final transcripts with grades for all course pre-requisites must be received no later than July 1 of the matriculation year.

Elective Courses:

The faculty of the College of Veterinary Medicine strongly encourages applicants to include as many of the following courses as possible among their electives. We have found that anatomy and physiology are especially challenging for students lacking a background in those subjects.

Animal Nutrition

Animal Reproduction

Anatomy

Animal Husbandry

Physiology

Business or Accounting

Genetics

Microbiology

Psychology

Statistics

Cell Biology

Any Biomed 1000-4000 level course at MU.

Courses That Are Not Accepted as Meeting Intended Requirements:

Actual course selection should be rigorous and demanding. The student who has difficulty in the professional curriculum is usually one who has never been previously challenged academically. Rudimentary courses in science, usually described as "not for science majors" are unacceptable for the required courses to apply for admission. Animal Science courses do not qualify toward the 10 credit hours necessary in biological sciences except for those that are cross listed in both departments or an equivalent arrangement as determined by the College of Veterinary Medicine.

Problems, topics, research, seminars or readings courses are not accepted for admission purposes. No more than two distance learning courses can be taken during an academic year.

College course credits acquired outside the United States are accepted for admission purposes only if they

are credited with grades and semester credit hours on a transcript from a college or university in the United States.

Courses taken on the P/F or S/U grading system are not counted for admission to the College of Veterinary Medicine. If a grade below a D is made in a required course, the course must be repeated.

Students may use credit by examination to substitute for pre-veterinary requirements only if their institution accepts those credits in lieu of a specific required course. Courses must be listed on U.S. transcript.

Courses taken to meet requirements for a two-year technical degree, such as veterinary technology or practical nursing, are included in the cumulative GPA calculations. However, restricted enrollment two-year technical degree courses are not accepted to meet minimum course requirements nor included in the last three semesters' GPA or average course load.

Time Required in Undergraduate Preparation:

Students accepted into the College of Veterinary Medicine have usually completed an average of 120 semester hours - 60 hours more than the minimum number required for admission.

Requirement for Observation of the Profession:

Applicants are required to spend *a minimum of 40 hours* observing one or more veterinarians actively engaged in their normal work environment. Observation must be as a third person, not as a client. (i.e., small or large animal practice, public health, laboratory animal medicine or research). The veterinarians observed by the applicant should be among the four invited external reviewers.

Personal Attributes and Experience Desired

The Admissions Committee feels that applicants should:

- a. have experience working with a variety of animal species;
- b. be familiar with the veterinary medical profession;
- c. be community minded and have demonstrated leadership abilities;
- d. be an effective communicator;
- e. have developed time and stress management skills;
- f. be sincerely motivated; and

- g. have realistically evaluated their plans for financing their education since demands of the professional curriculum usually preclude part-time employment during school sessions.

Shortages of veterinarians are not evenly distributed within the profession. However, the Committee does not select students by the type of work they say they wish to do as veterinarians. Interests of students frequently change during their four years of professional studies.

Approximately 50 percent of accepted students have completed degrees. No preference is shown for applicants with undergraduate or graduate degrees. Grades achieved in science courses are the primary academic determinant on the selection process.

Procedure to Apply for Admission

Timetable:

- July 1 to November 1....Online applications available.
- By October 1.....VMCAS application deadline for non-Missouri residents.
- By November 1Missouri residents submit Direct Application and non-residents submit Supplemental Application.
- By January 1Reference letters due
- January (Early).....Nonresident interviews. Date to be announced.
- By February 1.....MCAT or GRE scores, and transcripts due. Interviews begin for Missouri residents between February 10 - April 1.
- By April 15.....Selection results announced.
- By July 1.....Grades for all required courses due.



The MU College of Veterinary Medicine's companion animal hospital is the leading referral facility in Missouri.

Requesting Application Materials:

The University of Missouri does not accept Missouri resident applications through the Veterinary Medical Colleges Application Service (VMCAS). Our Direct application is found at www.cvm.missouri.edu. Non-Missouri residents may apply by completing a Direct application OR by submitting the VMCAS application and our Supplemental application from above website. Deadline for Direct and Supplemental application, Nov. 1.

Requirements for Application:

Each student must complete an application and have official transcripts from all institutions of higher education attended mailed to the Office of the Associate Dean for Academic Affairs.

Applicants must submit scores attained within the last three years from the general GRE or the Medical College Admissions Test (MCAT).

A minimum combined score of 640 must be obtained on the verbal and quantitative portions of the GRE, and a minimum of 1.5 on the analytical portion. If the MCAT is taken, a score of 15 or greater must be obtained.

Scores obtained prior to Spring 2009 not considered. No minimum score required for the revised GRE General Test.

For GRE and MCAT information:

GRE

www.GRE.org

MCAT

P.O. Box 4056

Iowa City, IA 52243

www.aamc.org

Applicants must meet all academic requirements regardless of degrees held. If currently enrolled in a graduate program, an applicant must submit his or her application with a letter from his or her major professor stating knowledge and approval of the student's application to the College of Veterinary Medicine.

Letters of Recommendation:

Letters of recommendation from influential citizens carry no more importance than letters from other individuals. Applicants submitting the Direct Application are allowed to list up to four evaluators. At least three evaluations must be returned to the MU College of Veterinary Medicine before January 1. At least one evaluator must be a veterinarian. Evaluations are not accepted from relatives by birth or marriage. Additional letters are not forwarded to the Admissions Committee.

Procedure for Evaluating Applicants

While the actual procedure may vary each year, applicants are evaluated academically and nonacademically.

Academic Evaluation:

An academic score will be assigned to each student by using cumulative grade point average (20 percent), the last three full-time undergraduate semesters while working toward a bachelor's degree (summer not included) (10 percent), average undergraduate course load (6 percent), and performance on the MCAT or GRE general examination (4 percent). Cumulative GPA must be at least 3.00/4.00. Grades for repeated courses are averaged for calculation of GPA.

NonAcademic Evaluation:

Each applicant will be scored by the Admissions Committee based upon nonacademic factors. The committee will evaluate the following:

- Motivation and concepts of the veterinary profession
- Animal/medical/biomedical research/public health experience (a higher value will be assigned to observation or experience with a veterinarian than with a non-veterinarian)
- Communication skills
- Leadership
- Extracurricular activities
- Work experience (while enrolled in school)
- Diversity and life experience

The nonacademic evaluation will constitute 40 percent of the total score

Overall Impression

Each applicant will receive a score for overall impression that is assigned by admissions committee members and will take into account the academic and nonacademic characteristics of the applicant. The score for overall impression will constitute 20 percent of the total score.

Six Year Academic Elimination Option:

Applicants may elect to have all courses taken and grades received prior to and including Spring semester 2006 ignored in the academic evaluation. If the applicant elects to eliminate courses and grades six or more years old, the required 60 semester hours of academic credit and all required courses (10 semester credit hours of physical science, etc.), including at least three semesters as a full-time undergraduate student, must have been taken within the last six years prior to application.

Repeating courses previously taken is not required or recommended. New courses that will fulfill course category requirements are preferred. If the applicant elects to eliminate courses and grades more than six years old, another evaluation using all courses and grades will not be done during the same year of application as part of the same application evaluation.

Personal Interviews:

Each Missouri applicant is invited for an interview with the Admissions and Scholarship Committee, provided they:

1. Have satisfactorily completed the required courses with a verified cumulative GPA of 3.00/4.00 or greater,
2. Had at least three letters of evaluation submitted with at least one being from a veterinarian,
3. Scored at least 640 on the GRE and a 1.5 on the analytical section or a 15 on the MCAT.

A few applicants whose academic score and non-academic score based on the written application and reference letters are exceptionally high may be accepted without an interview.

Based on a preliminary review of their application 150-180 nonresident applicants will be invited to interview for nonresident positions.

Admission requirements are the same for non-residents as for residents.

The Committee usually interviews nonresident applicants in early January and Missouri applicants from February through late March. Applicants are notified of their interview appointment during this time period.

The interview is required and intended to clarify and supplement the written application.

Notification of Selection:

Notification of acceptance or nonacceptance are mailed by April 15. All necessary information to prepare for entering the College of Veterinary Medicine is mailed to accepted students either at the time of notification of acceptance or before the beginning of the fall session.

Each accepted applicant is required:

- (1) to sign a statement agreeing to accept a position in the class and
- (2) to send a check for \$100 (\$500 for nonresidents) which is applied toward first semester fees

Financial Aid

Several loans and some scholarships are available to veterinary medical students from various sources.

Last year, the College of Veterinary Medicine awarded more than \$300,000 of grants and scholarships to students from endowments given to and managed by the College. Emergency loans may be available on an immediate basis.

For more information, contact:

MU Financial Aid
11 Jesse Hall
University of Missouri
Columbia, MO 65211
Phone: (573) 882-7506
(800) 225-6075 in Missouri

Open House

Each year, students in the College of Veterinary Medicine hosts an Open House for the public. Events include tours of the Teaching Hospital, milking cows, mule wagon rides, zoo club demonstrations, a petting zoo, raptor (birds of prey) demonstrations, and much more. For more information, visit the website at www.cvm.missouri.edu or call (573) 882-7821 or 884-6239.

Private Tours

Private tours are available by appointment for high school or college students and their families interested in applying to the MU College of Veterinary Medicine. To make an appointment, please call (573) 882-4397.

College Highlights and Strengths

- MU students begin their clinical training near the beginning of their third academic year.
- The MU Veterinary Medical Teaching Hospital sees almost 17,000 cases annually in three hospitals – small



Cattle and livestock are major components of Missouri's agri-business.

animal, equine and food animal. This allows students to see a large number of varied cases, giving them valuable clinical experience.

- The teaching hospital has specialty clinics in anesthesiology, cardiology, clinical nutrition, community practice, dentistry, dermatology, neurology, oncology, ophthalmology, orthopaedics, physical rehabilitation, radiology and theriogenology. MU is one of a handful of schools offering students exposure to so many specialties.
- More than \$300,000 of student scholarships are awarded by the college each year – in addition to state and federal aid.
- The College of Veterinary Medicine has been identified as one of the competitive assets of the Mizzou Advantage that set MU apart from other universities. The Mizzou Advantage comprises five unique strengths:
 - **One Health, One Medicine: The Convergence of Human and Animal Health**
 - **Food for the Future**
 - **Media of the Future**
 - **Sustainable Energy**
 - **Understanding and Managing Disruptive and Transformational Technologies**

Activities related to each competitive asset will be driven by a network of collaborators (faculty members, centers, departments, corporate partners and other universities). Not only will Mizzou Advantage increase MU's **visibility and stature** in higher education – increasing grant dollars and creating opportunities to recruit prominent scholars and researchers – but it will create jobs and improve the quality of life for Missourians.

- The MU Food Animal Clinic is one of the nation's busiest. MU is a leader in equine lameness research.

For information, contact:

Office of Academic Affairs
 W203 Vet Med. Bldg.
 University of Missouri
 Columbia, MO 65211
 Phone: (573) 882-4397



All statements in this publication, The College of Veterinary Medicine Admission Guide, are for informational purposes only and should not be interpreted as being contractual for any purpose.

The University of Missouri-Columbia does not discriminate on the basis of race, color, religion, national origin, ancestry, sex, age, disability, status as disabled veteran or veteran of the Vietnam era, or sexual orientation. For more information call Human Resource Services at (573) 882-4256 or U.S. Department of Education, Office of Civil Rights.

The University of Missouri-Columbia complies with the guidelines set forth in the American with Disabilities Act of 1990. If you have special needs as addressed by the ADA and need assistance with any portion of the application for admission process, notify us at (573) 884-6774 as soon as possible. Reasonable efforts will be made to accommodate your special needs.