

PRE-VETERINARY: ACADEMIC AND CAREER INFORMATION



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NATURE OF THE WORK, EARNINGS AND OCCUPATIONAL OUTLOOK

Veterinarians help animals and people live longer, healthier lives and serve society by preventing and treating animal diseases, improving the quality of the environment ensuring the safety of food, controlling diseases transmitted from animals, and advancing medical knowledge. Prospective veterinarians must have good manual dexterity, an affinity for animals and the ability to get along with animal owners. Additionally, they should be able to quickly make decisions in emergencies. In 2008, there were approximately 86,000 veterinarians practicing in the United States. The majority (69%) of veterinarians are in private or corporate clinical practice (American Veterinary Medicine Association), although significant numbers are involved in preventive medicine, regulatory veterinary medicine, military veterinary medicine, laboratory animal medicine, research and development in industry, and teaching and research in a variety of basic science and clinical disciplines (Veterinary Medical School Admission Requirements, 2008).

U.S. veterinary colleges/schools graduate an average of 2,500 students annually. Employment of veterinarians is expected to increase much faster than average for all occupations through the year 2018. In May 2008, the median annual earnings of veterinarians in practice was \$79,050 (Occupational Outlook Handbook, 2010-2011).

VETERINARY MEDICINE

There are 28 medical colleges/schools accredited by the American Veterinary Medical Association in the U.S., 5 in Canada and 8 in other countries. Prospective veterinarians must graduate from a 4-year program at an accredited college of veterinary medicine and obtain a license to practice, which is controlled by each state and provinces.

Veterinary graduates who plan to work with specific types of animals or specialize in a clinical area, such as pathology, surgery, radiology, or laboratory animal medicine, usually complete a 1-year internship. Interns receive a small salary but usually find that their internship experience leads to a higher beginning salary, relative to other starting veterinarians. Veterinarians who seek board certification in a specialty must also complete a 2- to 3-year residency program that provides intensive training in specialties, such as internal medicine, oncology, radiology, surgery, dermatology, anesthesiology, neurology, cardiology, ophthalmology, and exotic small animal medicine.

PRE-VETERINARY PREPARATION (COLLEGE)

Most veterinary medical colleges will only consider applicants who have a minimum grade point average (GPA). The required GPA varies by school, from a low of 2.5 to a high of 3.2. Those who receive offers of admission usually have a GPA of 3.5 or better. Any major is appropriate as long as applicants take the required pre-requisite courses. The prerequisites for admission vary by veterinary medical college. Many of these colleges do not require a bachelor's degree for admission. However, most of the students admitted have completed an undergraduate program. It is not necessary that a student complete a program specifically labeled "pre-veterinary" or "pre-vet." It is, however, necessary for applicants to complete all prerequisite requirements before enrolling in one of the 28 U.S. or 4 Canadian veterinary medical colleges/schools (Association of American Veterinary Medical Colleges).0

TESTING REQUIREMENTS

Standardized test requirements also vary at each school. Applicants must submit test scores from the Graduate Record Examination (GRE-general and/or subject tests) or the Medical College Admissions Test (MCAT), depending on the preference of each college.

CLINICAL EXPERIENCE

Veterinary medical colleges weigh heavily on a candidate's veterinary and animal experience in admissions decisions. Formal experience, such as work with veterinarians or scientists in clinics, agribusiness, research, or in some area of health science, is particularly advantageous. Less formal experience, such as working with animals on a farm or ranch or at a stable or animal shelter, is also helpful. Students must demonstrate ambition and an eagerness to work with animals. Many schools require experience in more than 1 type of animal setting.

COURSE REQUIREMENTS

Prerequisite requirements vary significantly from one institution to another. For a complete list of specific veterinary school/college prerequisites, please refer to the [Veterinary Medical School Admissions Requirements in the United States and Canada \(VMSAR\)](#), available for viewing at the HPAO resource library or the Association of American Veterinary Medical Colleges (AAVMC) website: <http://www.aavmc.org>

Students maintain responsibility for verifying course selection with individual veterinary programs. Listed below are the prerequisite admission requirements for the 2 Veterinary programs in California:

The University of California, Davis:

Application Deadline: October 1 (requires GRE)

Minimum Undergraduate GPA: 2.50 (Applicants not meeting minimum GPA can qualify for consideration by having a combined score in the upper 30th percentile on the GRE)

Required Courses (2006-2007 articulation agreement):

Pre-requisite Courses	CSULB Courses
One year of General Biology w/ lab	Biology 211 & 212 & 213 (Biology 111 w/ 111L & 212 w/ 212L & 213 w/ 213L if taken prior to catalog year 2010-11)
One year of General Chemistry w/ lab	Chemistry 111A & 111B
One year of Organic Chemistry w/ lab	Chemistry 320A & 320B or 322A w/ 323A & 322B w/ 323B
One year of Physics	Physics 100A & 100B or 151 & 152
One semester of Biochemistry (bioenergetics & metabolism)	Chemistry 441B or 448
One semester of Physiology	Biology 342 or 345
One semester of Genetics	Biology 370
Veterinary/Animal Experience	Complete 180 hours min. to evaluate an application

Additional requirements include 8 semester units of English (at least one course Eng 100), 8 semester units of social sciences and/or humanities, and one semester of statistics.

Western University of Health Sciences, College of Veterinary Medicine:

Application Deadline: October 1 (requires GRE or MCAT)

Minimum GPA (Overall, Science and Prerequisite): 2.75

Required Courses:

Pre-requisite Courses	CSULB Courses
3 Units of Organic Chemistry w/ lab	Chemistry 320A w/ 320L or 320B or 322A w/ 323A
3 Units of Biochemistry	Chemistry 441A or 448
9 Units of Upper Division Biological & Life Sciences w/ lab	Biology 304, 313, 316, 324, 342 w/ 342L, 345 w/ 345L, 350, 355 w/ 355L, 411, 444, 453 (Cannot double-count)
3 Units of Microbiology	Micro 200 or 211
3 Units of Genetics	Biology 370
3 Units of Physiology	Biology 342 or 345
3 Units of Statistics or Calculus	Biology 260 or Stat 108 or HDev 250I or Math 119A or Math 122
6 Units of General Physics w/ labs	Physics 100A & 100B
6 Units of English Composition	English 100, 101, 102, 300
Animal Experience (Animal medical environment, commercial animal production, regulatory animal control, or research environment)	500 minimum hours

Additional requirements include 1 course in public speaking, 1 course either Psychology or Sociology and 3 courses in the humanities/ social sciences. *Students are required to have a laptop computer at matriculation.

APPLICATION INFORMATION:

Students should ideally plan to apply between July and September of the year preceding the academic year they wish to enter. The Veterinary Medical College Application Service (VMCAS) allows students to submit an application to participating colleges. The VMCAS application deadline is October 1st. Non-participating schools' deadlines range from October 1 – March 1. It is wise to apply as early as possible.

For more information, please refer to the VMCAS section in the AAVMC web site: <http://www.aavmc.org>. If you are applying to a non-VMCAS school, you need to contact that school directly and complete their application.