Steps to Success:
Preparing to Apply to Veterinary School
**Veterinary Medicine: Quick Facts**

| Is this career right for you? | • Do you love working with animals, even those who are in distress from illness or injury?  
• Do you also love working with people (your clients and colleagues)?  
• Would you enjoy applying learning and applying science concepts, such as anatomy, physiology, and biochemistry, to understand disease processes and medical treatments for animals?  

All veterinary students are trained in the diagnosis and treatment of injuries and diseases in cats, dogs, horses, and cattle. Many veterinarians ultimately work in private or group practices and focus on treatment of companion animals or livestock. However, veterinarians can work in a variety of other environments, such as in lab animal medicine, wildlife or zoo animal medicine, research, teaching, public health, and policy. |
| Degree | DVM or VMD  
Each vet school offers only one or the other; the two degrees are considered to be identical.  
(There are historical reasons for the two names, but there is no functional difference.) |
| Dual Degree Programs | Dual degree programs take one to four years longer to complete than going to vet school alone, but typically take less time than completing each degree separately. (Note: Some of the schools that do not offer dual degree programs do offer more than one type of degree, but students would have to complete each separately.)  

A sampling of dental dual degree programs includes:  
• DVM/PhD or VMD/PhD: for people who want to have a very strong research component to their work, in addition to becoming a clinical veterinarian.  
• DVM/MPH or VMD/MPH: for people who want training in Public Health, in addition to becoming a veterinarian. These people often become involved in population-level veterinary initiatives, with the goal of improving animal health throughout an entire region.  
• DVM/MBA or VMD/MBA: for people who want formal business training, in addition to training to become a veterinarian. This business knowledge can help individuals effectively run private practices, but also prepares people to take on healthcare management roles in their careers. |
| Length of Professional Training | Vet school takes four years. After completing vet school, you may choose to go straight into practice. Some veterinarians choose to undertake a one-year veterinary internship, followed by a three-year veterinary residency, to gain advanced training as a general practice veterinarian or to become a specialist. |
| Major | Vet schools do not care what major you choose. Contrary to popular belief, you |
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## Major
Veterinary schools do not care what major you choose. Contrary to popular belief, you do not even need to choose a science major. Veterinary schools seek applicants who demonstrate intellectual curiosity and have done well in their coursework. The best major for you to choose is the one YOU will find most interesting and challenging.

## Admissions Test
**GRE General Test:** Graduate Record Exam
- Verbal Reasoning
- Quantitative Reasoning
- Writing Sample

Your goal is simply to earn a GRE score that is near the mean for admitted students for your schools of interest. On average, successful GRE test-takers devote a total of about 150 hours to GRE prep.
### Timing of Application

The application deadline is generally around the first week of October each year, for the following year’s entering class. We recommend submitting your application about one month in advance of the deadline.

### Reference Guides for School Selection

To look up school-specific admissions information, use the VMCAS (Veterinary Medical College Application Service) College Descriptor Pages, found online.

To quickly compare prerequisites, you can use the AAVMC’s Summary of Course Prerequisites PDF (also available online).

You may also want to purchase the Veterinary Medical School Admission Requirements (VMSAR) Handbook, which is sold through the AAVMC’s website.

### Number of schools to which to apply

We recommend applying to 3 to 6 well-chosen veterinary medical schools.

Most veterinary schools are public schools, where your state of residency will play a very strong role in your chances of acceptance. At public schools, all out-of-state residents must compete for the small number of seats that are allocated for out-of-staters. (If you are from a state without a veterinary school of its own, there will be at least one public veterinary school that offers the equivalent of in-state status to people from your state.)

The private veterinary schools do not use your state of residency as a factor in admissions, so you should especially consider applying to at least a couple of private schools. The private veterinary schools in the U.S. are:

- Cornell (NY)
- Midwestern (AZ)
- Tufts (MA)
- Western (CA)

### Letters of Recommendation

Each veterinary school sets its own guidelines regarding letters of evaluation, but the following assortment meets most schools’ requirements:

- One* from a CU Boulder science faculty member who has taught you in a science lecture or seminar course and can comment upon your intellectual engagement as a student.
- One veterinarian with whom you have worked or volunteered in a clinical setting, on an ongoing basis.
- One supervisor from a paid or volunteer position that has been meaningful to you.

* Note that some schools require either a second faculty letter -OR- a prehealth advisor letter. If you are interested in obtaining a CU Boulder prehealth advisor letter, you must complete a formal process that starts several months before you apply to veterinary school.

### Personal Attributes and Experiences

In addition to focusing on strong academic preparation, pre-veterinary students should also engage in activities that develop and demonstrate the personal attributes that are valued in healthcare professionals. During college, engage in experiences and activities that will help you address the following types of questions:

1. Is this person making an educated career choice?
2. Has this person demonstrated compassion and a commitment to being of service to others?
3. Does this person exhibit intellectual curiosity and strong problem-solving skills?
4. Does this person possess excellent interpersonal communication skills, both in teamwork roles and in leadership positions?
5. Does this person possess other valued character traits, such as maturity, professionalism, integrity, time management skills, and a willingness to take on new challenges?

Furthermore, veterinary schools especially seek applicants who have a strong history of animal experience. It is important for veterinary school candidates to be comfortable around all types of animals, including large animals, such as horses and cattle. If you do not have a background working with large animals, you should seek out volunteer or work experiences that will give you that experience. Formal animal handling experience with other types of animals, such as laboratory animals, exotic pets, or wildlife, are also valued.
Medicine (M.D. & D.O.) and Podiatric Medicine (D.P.M.)

Although the coursework listed below will meet the requirements for most medical schools, there is some variability among school policies. You must verify the prerequisites for each of the schools that interest you. Be aware that not all medical schools will accept AP or IB credit to meet program prerequisites. Thus, if you have AP or IB credit for any of the prerequisites, you may want to retake the courses during college (especially at the honors level, when possible).

**Most medical schools require a C or above in all prerequisites**, but be aware that most of these courses will be tested on the MCAT. If you earn a C or C+ in a course that is on the MCAT, you may want to repeat that course to master the material.

**MATH**

*Most medical schools require two semesters of college mathematics.*

*(Note: If you have already mastered the subjects listed here, you may take higher-level courses in the MATH department to fulfill the math prerequisite.)*

**Minimum:**

- Precalculus: MATH 1150 (4)

**Highly recommended for all pre-med students:**

- One of the following statistics courses:
  - PSYC 2111 (4), IPHY 2800 (4), or MATH 2510 (3)
  - (Statistics concepts are tested on the MCAT)

**CHEMISTRY**

*Recommended but optional: Introductory Chemistry*

- CHEM 1021 (4 - lecture and lab are combined)

**General Chemistry 1, with lab**

- Math prerequisite: Precalculus
  - Lecture: CHEM 1113 (4)
  - Lab: CHEM 1114 (1)

**General Chemistry 2, with lab**

- Lecture: CHEM 1133 (4)
- Lab: CHEM 1134 (1)

**Organic Chemistry 1, with lab**

- Lecture: CHEM 3311 (4)
- Lab: CHEM 3321 (1)

**Organic Chemistry 2, with lab**

- Lecture: CHEM 3331 (4)
- Lab: CHEM 3341 (1)

**ENGLISH LITERATURE and/or WRITING**

*(Note: Some schools specifically require one semester of each)*

- Any ENGL or WRTG course (or a scientific writing course)
- Another ENGL or WRTG course (or a scientific writing course)

**GENERAL PSYCHOLOGY**

*(Tested on the MCAT, but not an official prerequisite at most schools)*

- PSYC 1001 (3)

**INTRO TO SOCIOLOGY**

*(Tested on the MCAT, but not an official prerequisite at most schools)*

- SOCY 1001 (3)

**One semester of Biochemistry**

*(no lab needed)*

Choose one (either is fine):

- CHEM 4611 (3) -OR-
- CHEM 4700 (3)
**PHYSICS Option 1**

(Recommended Physics sequence for pre-health students, unless your major requires the other sequence)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
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<tbody>
<tr>
<td>General Biology 1, with lab</td>
<td>3</td>
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</tr>
<tr>
<td>Lecture: EBIO 1210</td>
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<td></td>
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<tr>
<td>Lab: EBIO 1230</td>
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| General Biology 2, with lab                 | 3       |                             |
| Lecture: EBIO 1220                          |         |                             |
| Lab: EBIO 1240                              |         |                             |

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**PHYSICS Option 2**

*Calculus-Based Physics 1*

Math corequisite: Calculus 1

- PHYS 1110 (4 – lecture only)

*Calculus-Based Physics 2*

Math corequisite: Calculus 2

- PHYS 1120 (4 – lecture only)

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**PHYSICS Option 3**

*Experimental Physics 1*

This is the only lab needed if you complete this entire physics sequence.

- PHYS 1140 (1)
Core Competencies for Prehealth Students
(Adapted from the Association of American Medical Colleges’ list of core competencies for entering medical students)

Educated Career Choice:
• Realistically acknowledges the responsibilities, challenges, and rewards inherent to the profession, as informed by recent shadowing experiences with healthcare professionals and recent history of patient interaction in clinical settings.
• Demonstrates awareness of current events (scientific and political) that are shaping healthcare.
• Demonstrates motivation and commitment to a lifetime in intended career.

Competencies in Thinking, Reasoning, and Relevant Knowledge:
• Critical Thinking: Uses logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
• Scientific Inquiry: Applies knowledge of the scientific process to integrate and synthesize information, solve problems and formulate research questions and hypotheses; uses the language of the sciences to participate in the discourse of science and explain how scientific knowledge is discovered and validated.
• Quantitative Reasoning: Applies quantitative reasoning to describe or explain phenomena in the natural world.
• Written Communication: Effectively conveys information to others using written words and sentences.

Interpersonal Competencies
• Service Orientation: Demonstrates a desire to help others and a sensitivity to others’ needs and feelings. Demonstrates a desire to alleviate others’ distress. Recognizes and acts on personal responsibility to society: locally, nationally, and globally.
• Social Skills: Demonstrates awareness of others’ needs, goals, feelings. Recognizes the ways social and behavioral cues affect peoples’ interactions and behaviors. Adjusts behaviors appropriately in response to these cues. Treats others with respect.
• Cultural Sensitivity: Demonstrates sensitivity to the complexities of delivering quality healthcare to patients of diverse backgrounds. Demonstrates knowledge of social and cultural factors that affect interactions and behaviors. Shows an appreciation and respect for multiple dimensions of diversity. Engages diverse and competing perspectives as a resource for learning, citizenship, and work. Recognizes and appropriately addresses bias, both in self and others. Interacts effectively with people from diverse backgrounds.
• Effective Teamwork and Leadership: Works collaboratively with others to achieve shared goals. Shares information and knowledge with others. Puts team goals ahead of individual goals. Demonstrates insight into how to organize, motivate, and empower others to do their best work.
• Oral Communication: Effectively conveys information to others using spoken words and sentences. Listens effectively. Recognizes potential communication barriers and adjusts approach as needed.

Intrapersonal Competencies
• Ethical Responsibility to Self and Others: Behaves in an honest and ethical manner. Cultivates personal and academic integrity. Adheres to ethical principles. Follows rules and procedures. Resists peer pressure to engage in unethical behavior. Encourages others to behave in honest and ethical ways. Develops and demonstrates ethical and moral reasoning.
• Reliability and Dependability: Consistently fulfills obligations in a timely and satisfactory manner. Takes responsibility for personal actions and performance.
• Resilience and Adaptability: Demonstrates tolerance of stressful or changing environments or situations and adapts effectively to them. Is persistent, even under difficult situations. Recovers from setbacks.
• Capacity for Improvement: Sets goals for continuous improvement. Engages in reflective practice for improvement. Solicits and responds appropriately to feedback.

Science Competencies
• Living Systems: Applies knowledge and skill in the natural sciences to solve problems related to molecular and macro systems including biomolecules, molecules, cells, and organs.
• Human Behavior: Applies knowledge of the self, others, and social systems to solve problems related to the psychological, socio-cultural, and biological factors that influence health and well-being.
1. **Academics**

   A. **Academics:** Your goal is to aim for consistently earning all As and Bs, with more As than Bs. If you see this as a challenging goal, what is your plan for addressing academic challenges?

   B. How do you plan to go beyond the basic requirements for completing your undergraduate degree and to show intellectual curiosity, critical thinking, and/or problem solving? (Note: this answer will evolve over time.)

2. **Learning about the professions that interest you/learning to interact effectively with patients**

   A. Have you shadowed any health care professionals?
      
      If so, have you been keeping a list of whom you’ve shadowed (include specialty), beginning and end dates, and hours with each person? (If you haven’t been making such a list, make it now.)

      If you have plans for new/additional shadowing, list them here.
B. Have you recently spent time interacting directly with patients in a clinical setting (either paid or volunteer work)?
   If so, have you been keeping a list of each position, beginning and end dates, average hours/week, and your role? (If you haven’t been making such a list, make it now.)

   If you have plans for new/additional direct patient contact, write it here.

C. Are you keeping abreast of current health care issues (including current events, health care policy changes and ethics issues)? If so, how? If not, what is your plan to educate yourself on these topics?

D. What are the key factors that are drawing you to a career in your chosen profession? (Note: this answer will evolve over time, becoming more specific as you have more clinical experiences and more time to reflect on them.)

3. Cultivating relevant personal skills/traits

   A. Expressing your desire to help others/your compassion for others
      a. What service-based, non-clinical roles have you held (volunteer or paid)? These can include retail/restaurant jobs, teaching/tutoring, direct service to others as a volunteer, etc.
         (Include beginning and end dates, average hours/week, brief description of responsibilities)

      b. What is your plan to continue growth in this area?
B. Cross-cultural sensitivity
   a. What you are doing or have done to learn about people whose life circumstances are very different than your own?

   b. What is your plan to continue growth in this area?

C. Insights into effective leadership
   a. Have you had the opportunity to develop your ability to serve as a leader and motivator of others? If so, list your leadership positions (title, beginning and end dates, average hours/week, brief description of responsibilities)

   b. What is your plan to continue growth in this area?

D. Insights into effective teamwork
   a. Have you had the opportunity to work together with peers, as a team of equals, to achieve a common goal? If so, list your teamwork positions (title, beginning and end dates, average hours/week, brief description of responsibilities)

   b. What is your plan to continue growth in this area?
E. **Expressing your intellectual curiosity and engaging in critical thinking**
   Are you actively participating in research? (Or have you in the past?) If so, what is your plan for making this work as intellectually rewarding as possible?
   If not, write down your plan to reach out for research opportunities or to express your intellectual curiosity in some other way.

F. **Other Employment**
   a. What other **post-high-school** jobs have you held that call upon skills/strengths that are relevant to your future work in healthcare (i.e., interpersonal communication skills, time management, attention to detail, etc.)?

G. **Work-life balance**
   a. What do you do for fun and/or to reduce stress?

   b. Is there a new activity you’d like to try this year?
4. Disadvantaged status: If you can answer yes to any of these questions, let your prehealth advisor know. You are likely eligible for special prehealth pipeline programs and perhaps for fee assistance programs when you go through the professional school application process.

   A. Are you a member of a racial/ethnic group that has been historically underrepresented in careers in healthcare? (African Americans, Mexican-Americans, Native Americans (American Indians, Alaska Natives, and Native Hawaiians), Pacific Islanders, and mainland Puerto Ricans)

   B. Are you disadvantaged economically? (Typically defined as being a member of a family with total annual income that is no more than three times the national poverty level for a family of a given size.)

   C. Did you grow up in a rural/medically-underserved community?

   D. Are you a first-generation college student?