

Recommendations for students interested in veterinary medicine

I. Suggested coursework

A. Selecting an Undergraduate Major

Veterinary Students can come from any science major. However, given our liberal arts curriculum and courseloads required by most of our undergraduate majors, we **STRONGLY RECOMMEND** that you select Biology as your major. Most of your course requirements for veterinary medicine can be fulfilled within the major. If you select another major such as Neuroscience or Biochemistry, it is technically possible to fulfill the requirements – however, you will need to take many extra courses (or possibly get a second major or a minor).

It would be advantageous if you are a member of our programs of distinction (SJLA or Honors), but this is NOT a requirement. An advantage of participation in the Honors program is that you will obtain the research background as part of your normal coursework.

B. Biology courses:

Coursework is important in giving you the necessary academic and intellectual preparation for the rigors of veterinary study. It is therefore important to select courses that challenge your critical thinking abilities, and that give you the discipline to work in a challenging environment.

However, there are some courses that are required by different schools that you should take prior to admission into a veterinary program. While the requirements differ, the list below outlines the most common requirements of many veterinary programs

Courses that are **required** by many programs:

- General Biology (Bio 141/142)
- Genetics (Bio 260 and 260L)
- Microbiology (Bio 250 and 250L) *Note:* according to some of our veterinarian alumni, they find it very helpful in veterinary school and in clinical practice.
- Bio Stats (Bio 379) * *Note:* many programs require a mathematics-based statistics course. Math 204 fulfills this requirement, and Psych stats does not; however, it looks much better if you take Bio 379.

Courses that are **highly recommended**:

In the opinion of our students who are in veterinary programs, these courses deliver content and provide academic rigor that are helpful in their veterinary studies

- Comparative Vertebrate Anatomy (Bio 241 and lab)
- Cellular Biology (Bio 350)
- Developmental Biology (Bio 351)

- Histology (Bio 352 and lab)
- Molecular Biology (Bio 361)

NOTE: when applying to different schools, check their admissions requirements carefully. For example, some schools require Molecular Bio, and some even ask for Molecular Bio II.

C. Cognate and GE courses

Many vet schools require the following:

- Organic Chemistry – almost all vet schools require at least 1 semester, and many ask for at least 8 credits (so 1 year of Organic Chemistry and the Labs)
- Biochemistry (Chem 350; required in some programs, check with individual schools)
- Physics (1 year; so take this as part of your normal cognates)
- A Math-based statistics course. Bio 379 (recommended) or Math 204
- 1 year of English (including a literature course)
- Public speaking course (this can generally be fulfilled by our GE requirement)

D. GPA requirements:

Remember that admission to veterinary medicine is highly-competitive. Aim to hold your GPA at **3.7** or above. If your GPA is below that, make sure that your application has many other strong areas that could convince an admissions board to consider your application.

II. Extracurricular activities

A. Veterinary Experience

Perhaps the most important activity in which you will engage is shadowing a veterinarian. All schools require prior experience with veterinarians.

- Check with your potential schools for their shadowing requirements. Some schools (such as U Penn) can ask for as many as 500 hours. Try to get this experience both during the school year and in the summer. If possible, get a job in a veterinarian's office.
- Get experience with a variety of veterinarians (aim for *at least* three)
- Try to arrange it so that you get **HANDS-ON** experience with working with animals. This may entail some patience – while you may start out working with a vet by doing clerical work, do a good job and give the vet a reason to trust you and your abilities and eventually get you working hands-on with the animals.

- Make sure that at the end of your stint with the veterinarian, he or she would be willing to write a good letter of recommendation for you.

B. Research

Many veterinary programs expect that you have some laboratory research experience. Research experience gives you a number of important attributes:

- It proves that you are interested in and enthusiastic about science
- It teaches you how to think critically
- It teaches you independence and responsibility

We have many ways of getting involved with research in addition to the [Honors Program](#). Check [here](#) for more information.

C. Other activities

In general, there is no single set of extracurricular activities that will be particularly advantageous. Extracurricular activities are there for YOU. They help mold you into a well-rounded person. Therefore, you should select activities that you are passionate about and that truly enjoy.

When you apply for veterinary school, the committees will most likely look at the list of your activities, but their questions will revolve around what you learned from your activities. So for example, if you are involved with Habitat for Humanity or Urban Beats because you love doing it, think about positive skills and experiences that you gain from such activity. Remember, the hallmark of a thinking person is his or her ability to turn anything in to a learning experience.

Therefore, when selecting extracurricular activities, focus on QUALITY and NOT QUANTITY. Remember the motto: “*Non multa, sed multum*” (“Not many, but much”).

Do something out of the ordinary, but do so because that is who you are. Schools like to see extraordinary experiences. Our alumni often report that interviewers look for things in your resume that are different or unusual; for example: a Philosophy Major (in addition to Biology major); participation in a study-abroad or a travel course; ; membership in varsity sports, or singing with the University chorus. But to borrow from Shakespeare: “**this above all, to thine own self be true**”. If you do something because you think it will get you into veterinary school, it won’t. Usually, interviewers can spot the activities that are done which are consistent with your individual personality and those that are done to solely to bolster your record.

III. Admissions Tests: the GRE or the MCAT

All veterinary programs require that you take the [GRE \(Graduate Record Exam\)](#), although some will accept the [MCAT](#) (Medical College Admissions Test). While both of these

exams are tests of intellectual capacity and critical thinking ability, the MCATs are more extensive in their scope and coverage. Thus taking the GRE is a more prudent course of action.

Veterinary schools require that you take the GRE General Test, and very few expect that you take the Subject Test. The GRE General Test assesses verbal reasoning, quantitative reasoning, critical thinking and analytical writing skills that are not specific to any field of study.

- **Analytical Writing** — Measures critical thinking and analytical writing skills, specifically the test taker's ability to articulate complex ideas clearly and effectively
- **Verbal Reasoning** — Measures reading comprehension skills and verbal and analogical reasoning skills, focusing on the test taker's ability to analyze and evaluate written material
- **Quantitative Reasoning** — Measures problem-solving ability, focusing on basic concepts of arithmetic, algebra, geometry and data analysis

(taken from the [GRE website](#))

NOTE: Veterinary Schools are primarily interested in your quantitative reasoning abilities, and not as interested in your verbal reasoning abilities. This is because the GRE is given to all graduate students, including those who are interested in Literature, English, Philosophy, etc. (and their verbal skills are typically much better than science students). However, this does not give you the “green light” to ignore your verbal skill development. Just don’t panic if your verbal scores are not that high.

IV. The Application Process

A. Recommendation Letters

Most veterinary schools typically do NOT consider a committee letter as part of the recommendation package. Almost all of them require letters from *at least* one faculty member and one (frequently, two) veterinarians.

For your faculty letter, try to select a faculty member who knows you well, who has had you as a student, who knows your strengths and weaknesses, and who understands the requirements for veterinary school admission. As an alternative, you can go through the University’s HPEC committee; the committee members will conduct an interview and prepare a non-committee letter signed by the scientist on the interview team. If you opt to do this, try to select an interview committee that has a Biology faculty member (such as Dr. Hardisky, Gomez, or Smith) that is familiar with veterinary school admissions requirements.

For your veterinarian letters, try to select veterinarians for whom you have worked, who is familiar with you as an academic entity, or with whom you have had a professional working relationship. While it may be nice to have your family veterinarian or a veterinarian family friend who has seen you grow up write a letter on your behalf, this letter may not adequately address your academic qualifications or your potential as a veterinary professional.

B. VMCAS

The [VMCAS](#) is owned and operated by the [American Association of Veterinary Medical Colleges \(AAVMC\)](#). The AAVMC coordinates the affairs of all veterinary medical colleges in the United States and Canada, including some departments of veterinary science, departments of comparative medicine, and seven international colleges of veterinary medicine. The VMCAS is the central application portal for all these entities. The VMCAS application that you will fill out is sent to all the schools to which you would apply.

The application portal usually opens in June of the year that you would apply (your rising senior year), and the application is due October. Note that this application is quite extensive and takes a lot of time to fill out, so start early! The VMCAS application will include a comprehensive list of all your college courses and all your activities, going all the way back to high school.

It will also include a personal statement that will be limited in length. So you have to make this statement complete yet succinct. Therefore, take your time and invest a good deal of effort writing the statement. Have many people proofread it for you (including faculty, veterinarians with whom you worked, and your mentors)

It also helps to get your letters of recommendation early, so don't dally!

So stay on top of everything and submit the application EARLY. Don't wait until the last minute to submit it.

C. GRE

Instructions for applying for and taking the GRE can be found on their [website](#). When preparing for the GRE, the best thing to do is to PRACTICE extensively rather than "study" for it like you would a regular exam. The exams are given on computer, and you have to be very familiar with this style of testing.

Your GRE scores will usually be due to your schools by November, so make sure that you take it by early October. While you should aim to do well the first time you take it, you might want to give yourself time to retake the test in case you need to. Thus, it is advisable to take it sometime late summer or early September.

D. Costs

SAVE MONEY!

Applications are expensive – approx \$250 per school, plus the costs of the GRE and copies of your transcript. Be prepared to spend quite a bit, but you don't want money to be the reason that you limit the number of schools to which you apply. So be prepared for the expenses.

E. Selecting your school

Veterinary schools often have geographical restrictions – many schools are required to serve applicants from their state or area of the country. Therefore, many of them will take very

few out-of-state applicants (for example, UC Davis only takes TWO people from out-of-state). Look at each school's website, and measure your odds accordingly. If you want to apply to a school that takes very few (10 or less) out-of-state students, your application must be spotless; otherwise, you may be wasting your effort and money.

F. Early Admission

Some schools allow you to apply for early admission, which means that if you are accepted and you can complete your undergraduate studies in three years, you can be admitted into a veterinary program. This option requires you to be an outstanding applicant, and requires a lot of preparation on your part. Make SURE that you work with your academic advisor very carefully to do this.

Note that if you apply for Early Admission and are not accepted, this does not preclude you from applying again in your senior year. In fact, although this is a time- and effort-consuming effort, some of our alumni say that it is worth it so that you gain experience in assembling your application and interviewing at schools.

G. Preparing for Interviews

If you are called to interview at a veterinary school, it will be to your benefit to do a mock interview. Many people will be willing to help you, especially people in [Career Services](#), your faculty, your veterinarian mentors, or our alumni.

Be prepared for questions about anything in your application – your research, shadowing, and extracurricular activities. Make sure that you know the details of things that you did (for example, your research projects). When asked about your activities (see section II.C., above), be sure you can answer questions that address “what you learned” from each experience that you had, or how these experiences helped prepare you for a career in veterinary medicine.

Some schools conduct “behavioral tests” – questions that are very situational, and ask how you would respond in certain situations. People in Career Services can help you with this.

V. Timeline for planning your undergrad career

The following is a general guideline for planning your undergraduate studies and involvement. You do not need to follow this to the letter.

1st and 2nd year of college:

- In addition to your studies, this is a good time to get veterinary experience. Start early! Be aggressive in your search! Try to make sure that you get hands-on experience working with animals. Try to do this BOTH during the schoolyear and during the summer.
- If possible, get involved with research at the University. If faculty from the Biology department do not have open research slots, make sure you look

OUTSIDE the department (Chemistry, Psych, Physics, etc.) or OUTSIDE the university (Commonwealth Medical College, Sanofi-Pasteur, Schott, etc.)

- If possible, apply for summer research fellowships. These are typically given at research universities to undergraduate students from all over the country. These are usually very competitive, but they are great learning experiences.
- Select an academic advisor that could help you plan your coursework appropriately. Select one who is familiar with the requirement for veterinary school admission. The Health Professions Organization (HPO) at the University is NOT the place to go for this.

2nd year of college:

- Start researching the requirements for potential vet schools and PLAN YOUR COURSEWORK. Try to make sure to space out all your science coursework throughout your four years of college. Do NOT cram them all into your last 3 or 4 semesters of study.
- Start familiarizing yourself with the GRE – what does it look like? What kinds of questions do they ask? What types of things would you be expected to know?

3rd year of college:

- Start preparing for your VMCAS application. If you have not done so yet, start collecting material for your application (documentation of your activities and awards)
- During the summer of your junior year as you are a rising senior, make SURE that you will have enough volunteer hours. Take your GREs if you plan to apply.

4th year of college:

- Continue working on your academic record, on your extracurriculars, and on your shadowing/research activities.
- Start getting ready for interviews
- Start thinking about a “Plan B” (i.e., what could you do if you DIDN’T get in to vet school? What type of jobs could you get that might help prepare you for re-applying? In what graduate programs could you enroll to help you reapply?)

VI. Some useful hints

- Keep balance in your life. If you do too much shadowing or veterinary experience at the expense of your academics, this is not good.
- Keep a dossier of all of your achievements, going all the way back to high school. Keep updating this dossier every time you do something new or different.
- Keep in touch with all your former employers and doctors whom you shadow. Make sure that you have a good working relationship with them.
- Select an academic advisor or a mentor that could really work with you and help you achieve your goals. You can switch academic advisors by following [the procedure](#) outlined on our Biology Department Website.

- Space your coursework throughout your undergraduate years. Do NOT cram them all into one year!
- Be realistic! If after your sophomore year, you are riding a 3.0 GPA, do the math – you REALLY think you can pull a 4.0 average all the way to the end? And even if you do, this only brings your GPA to 3.5... do you think this would be enough?
- Learn from every experience that you have.
- Be confident without being self-delusional.
- If you are an underclassman: talk to our alumni and our upperclassmen. Do NOT listen to your classmates. Remember: NONE of them have gotten into veterinary medical programs.