VETERINARY MEDICINE
Veterinarians play a major role in the health of our society by caring for animals; they also use their expertise and education to protect and improve human health. It’s likely that you are most familiar with veterinarians who care for our companion animals, but there are many other opportunities for veterinarians.

There is a growing need for vets with post-graduate education in particular specialties, such as molecular biology, laboratory animal medicine, toxicology, immunology, diagnostic pathology or environmental medicine.

The veterinary profession is becoming more involved in aquaculture, comparative medical research, food production and international disease control.
The following list is not exhaustive but provides an overview of careers where graduates of veterinary medical schools can effectively apply their Doctor of Veterinary Medicine (DVM) degrees.

- **Private practice**, either general practice or (with advanced training and experience) a specialty field, such as ophthalmology, orthopedics, aquatic animal medicine, marine biology, wildlife animal medicine, or emergency animal medicine.

- **The Federal Government** employs veterinarians through the United States Department of Agriculture (USDA), National Institutes of Health (NIH), Centers for Disease Control (CDC), and Food and Drug Administration (FDA) working on biosecurity, environmental quality, public health, meat inspection, regulatory medicine, and agricultural animal health, or the investigation of disease outbreaks.

- **Research**, either in a university setting or with companies that produce animal-related products or pharmaceuticals.

- **Public Health**, particularly with governmental agencies such as the United State Public Health Service, which works to control the transmission of animal-to-human (zoonotic) diseases.

- **Global Veterinary Medicine**, in private practice or with international agencies working in areas such as food production and safety or emerging diseases.

- **Public Policy**, working for governments on animal and zoonotic diseases, animal welfare, public health issues, or as consultants with non-governmental agencies.

read more…

http://www.aavmc.org/additional-pages/Veterinary-Career-Options.aspx
Veterinarians who work directly with animals use a variety of medical equipment, including surgical tools and x-ray and ultrasound machines. They provide treatment for animals that is similar to the services a physician provides to treat humans.

Veterinarians typically:

- Examine animals to diagnose their health problems
- Treat and dress wounds
- Perform surgery on animals
- Test for and vaccinate against diseases
- Operate medical equipment, such as x-ray machines
- Advise animal owners about general care, medical conditions, and treatments
- Prescribe medication
- Euthanize animals
Today’s veterinarians are extremely dedicated to protecting the health and well-being of animals and humans. Veterinarians are animal lovers and understand the value of animals in our families and society. Other personal attributes that contribute to a successful career in veterinary medicine are:

- **A Scientific Mind**  
  A student interested in veterinary medicine should have an inquiring mind and keen powers of observation. Aptitude and interest in the biological sciences are important.

- **Good Communication Skills**  
  Veterinarians must meet, talk, and work well with a variety of people. Compassion is an essential attribute for success, especially for veterinarians working with owners who form strong bonds with their animals.

- **Leadership Experience**  
  Many environments (e.g., clinical practice, governmental agencies, public health programs) require that veterinarians manage employees and businesses. Having basic managerial and leadership skills contribute to greater success in these work environments.

https://www.avma.org/public/YourVet/Pages/Veterinarians.aspx
Veterinary School Requirements

Most schools require:

- 2 semesters General Chemistry with lab (CHM 201 + 202)
- 2 semesters Organic Chemistry with lab (CHM 303 + 304)
- 2 semesters Physics with lab (PHY 101/103 + 102/104/108)
- 2 semesters Introductory Biology with lab (EEB 211 + MOL 214)
- 1 semester Biochemistry (MOL 345)
- Math: 1 semester calculus (MAT 103), 1 semester statistics (any stats course)
- 2 semesters English (WRI + one additional)

Some schools require:

- Advanced Biology (e.g., Genetics, Microbiology)
- Public Speaking (ENG 230)
- Required hours of work with animals
- The Graduate Record Exam (GRE)

For more specific information, see the AAVMC Summary of Course Prerequisites Chart
# Sample Vet School Curriculum from U Penn School of Veterinary Medicine

## First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Gross Anatomy</td>
<td>➢ Gross Anatomy (Cont.)</td>
<td>➢ Neurosciences (Cont.)</td>
</tr>
<tr>
<td>➢ Histological Basis of Pathology</td>
<td>➢ Neurosciences</td>
<td>➢ Physiology (Cont.)</td>
</tr>
<tr>
<td>➢ Developmental Biology</td>
<td>➢ Physiology</td>
<td>➢ ICVM III</td>
</tr>
<tr>
<td>➢ Cellular &amp; Biochemical Foundation of Disease</td>
<td>➢ ICVM II</td>
<td>➢ Introduction to Radiology</td>
</tr>
<tr>
<td>➢ Intro to Clinical Veterinary Medicine I (ICVM I)</td>
<td>➢ Intro to Comparative Medical Research (cont’d)</td>
<td>➢ Nutrition</td>
</tr>
<tr>
<td>➢ Intro to Comparative Medical Research</td>
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<td>➢ Immunology</td>
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## Second Year

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<tr>
<th>Fall Semester</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
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<tbody>
<tr>
<td>➢ General and Systemic Pathology</td>
<td>➢ Pharmacology &amp; Toxicology</td>
<td>➢ Pharmacology/Toxicology (cont’d)</td>
</tr>
<tr>
<td>➢ Parasitology</td>
<td>➢ Intro Poultry/Swine/Dairy</td>
<td>➢ Epidemiology</td>
</tr>
<tr>
<td>➢ Microbiology</td>
<td>➢ Medicine/Surgery I</td>
<td>➢ Veterinary Public Health</td>
</tr>
<tr>
<td>➢ Surgical Principles</td>
<td>➢ Clinical Pathology</td>
<td>➢ Infectious &amp; Metabolic Diseases</td>
</tr>
<tr>
<td>➢ Intro to Clinical Veterinary Medicine IV (ICVM IV)</td>
<td>➢ Orthopedics</td>
<td>➢ Medicine/Surgery I (cont’d)</td>
</tr>
<tr>
<td></td>
<td>➢ ICVM IV (cont’d)</td>
<td>➢ Clinical Pathology (cont’d)</td>
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<td>➢ Anesthesia</td>
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<td></td>
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<td>➢ Intro to Clinical Veterinary Medicine IV (ICVM IV) (cont’d)</td>
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## Third Year

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<thead>
<tr>
<th>Fall Semester</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Reproduction</td>
<td>➢ Dermatology</td>
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<tr>
<td>➢ Med/Surg II</td>
<td>➢ Clin Animal Behavior</td>
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<tr>
<td>➢ Vet. Ethical Issues</td>
<td>➢ Clinical Exercises (Cont’d)</td>
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<tr>
<td>➢ ICVM V</td>
<td>➢ Emerging and Exotic Diseases of Animals</td>
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</tr>
<tr>
<td>➢ Clinical Exercises</td>
<td>➢ ICVM V</td>
<td></td>
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</tr>
<tr>
<td>➢ Electives*</td>
<td>➢ Electives*</td>
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## Fourth Year

| Quarter 0                                                                 | Quarter 1                                                                 | Quarter 2                                                                 | Quarter 3                                                                 | Quarter 4                                                                 |
|                                                                          |                                                                          |                                                                          |                                                                          |                                                                          |
| ➢ Rotations 1-8                                                           | ➢ Rotations 9-12                                                          | ➢ Rotations 13-16                                                         | ➢ Rotations 17-20                                                         | ➢ Rotations 21-25 |

POPULAR VETERINARY SCHOOLS
RECEIVING THE MOST APPLICATIONS FROM PU STUDENTS FOR 2012-2016

- Colorado State University College of Veterinary Medicine & Biomedical Sciences
- Cornell University College of Veterinary Medicine
- North Carolina State Veterinary Medicine
- Cummings School of Veterinary Medicine at Tufts University
- University of California Davis Veterinary Medicine
- University of Minnesota-Twin Cities College of Veterinary Medicine
- University of Pennsylvania School of Veterinary Medicine
- University of Wisconsin School of Veterinary Medicine

*Princeton alums matriculated at these schools*
**Pre-Veterinary Experience Opportunities**

- **AVMA Veterinary Internships**
- **SVC TigerTAILS**  
  Sign up to volunteer in local no-kill animal shelters.
- **Tufts Adventures in Veterinary Medicine Program** (North Grafton, MA)  
  Application deadline: rolling- files reviewed in March- apply early!
- **Duke Pre-Veterinary Society Summer Internships and Opportunities**  
  A useful list of organizations that Duke prevet students have found useful in finding internships.
- **Hamilton College Pre-Veterinary Internships**  
  A list of pre-veterinary internships across the United States.
- **International Veterinary Medicine Internships**
- **Purdue University Veterinary Scholars Summer Research Program** (W. Lafayette, IN)  
  Application deadline: February 2
- **Internships & Externships with PAWS**
**Articles of Interest**

- Losing My Best Friend: The Story of Why I Became a Veterinarian
- 13 Things I Wish I Knew Before I Became a Veterinarian
- Ice Reminds Me Why I Became a Veterinarian
- The Truth About Becoming a Veterinarian (You Need More than Just a Love of Animals)
- Why I am a Laboratory Animal Veterinarian
- Why I Gave Up Becoming a Veterinarian (I Couldn’t Kill Animals)
- So You Want to be a Veterinarian? Be a Vet Tech First
- Ten Veterinarians Who Made History- Who’s On Your List?
- Cats and Dogs Could Help Human Disease Breakthrough
- How Beagles and Goldens Could Help Researchers Find the Next Cancer Therapy for Humans
- Veterinary Marijuana?
- Tending to the Needs of Pets Affected by Residential Fires
For more Information

- Association of American Veterinary Medical Colleges: AAVMC.org
- AAVMC Student Portal: AAVMC.org/Students-Applicants-and-Advisors.aspx
- VMCAS: vmcas.liaisoncas.com/applicant-ux/#/login
- American Veterinary Medical Association: AVMA.org
- New Jersey Veterinary Medical Association: NJVMA.org
- AAVMC College Descriptor Pages: aavmc.org/College-Specific-Requirements/College-Specific-Requirements_College-Specifications.aspx
- One Health Initiative: onehealthinitiative.com/