

Pre-Veterinary Program in the Biology Department at Winthrop University

INTRODUCTION

Veterinarians care for the health and wellness of animals and practice in a variety of settings including general, emergency, corporate/industry, research, public health, pharmaceuticals, and teaching. Clemson is scheduled to open a DVM program in Fall 2026, but currently there are no colleges of Veterinary Medicine in South Carolina; however, three out-of-state schools admit a fixed number of SC residents as “in-state” students. These schools include: University of Georgia, Tuskegee University, and Mississippi State University.¹ Other schools may allow students to pay in-state tuition after the first year. These Doctor of Veterinary Medicine (DVM) programs are highly competitive and require several steps to apply.^{2,3,4}

Students interested in pursuing a career in Veterinary Medicine may major in any area, but should ensure that they complete the prerequisites listed below. As prerequisites vary slightly depending on program, students should check the specific requirements of the individual school they are interested in applying. In addition, admission to DVM programs is highly competitive, so students will need to maintain a strong GPA. For example, students accepted into Mississippi State have an average GPA of 3.6.³

Although many no longer require the it, some schools also require students to take the GRE (Graduate Record Examination) with the Analytical Writing (i.e. Tuskegee). Depending on the target school, students should plan on studying and preparing for the GRE before taking the exam. Beyond the VMCAS system application, some schools also require supplemental applications and fees. Students must also gain exposure to the Veterinary Medicine profession by working under the direct supervision of a veterinarian. At UGA, a minimum of 250 hours are required² and at Tuskegee a minimum of 200 hours are required.⁴ Students may consider BIOL 461 or BIOL 463 for internship credit, which will document the number of clinical hours obtained. Students should try to get experience working with a variety of animals (e.g., smaller animals such as cats and dogs and larger animals such as horses and pigs). Some programs may consider research hours as relevant experience.

Additionally, students should strive for a well-rounded background in extracurricular activities, such as leadership roles in student organizations, athletic participation and/or community service.

COURSEWORK

The following are only guidelines; students should consult their advisors and programs of interest to plan their academic schedule.

Biology:

General Biology I and II with labs (BIOL 220/222, 221/223)
Human Anatomy and Physiology I and II (BIOL 307 and 308 - must take both to count)
Microbiology **with lab** (BIOL 310)
Cell Biology (BIOL 315 or 320)

Chemistry:*

General Chemistry I and II (CHEM 201 and CHEM 202) or **CHEM 211 (Accelerated)
General Chemistry Lab (CHEM 204)
Organic Chemistry I and II with labs (CHEM 301, 302, 304)
Biochemistry with lab (CHEM 523/525)

*Note that this sequence may satisfy the requirements for a minor in Chemistry

**If CHEM 211 was taken in the first semester, the student only needs to take 204, not 202, in the second semester. But will only have 6 credits

Physics:

Physics I and II with labs (PHYS 201/201L, 202/202L or 211/211L, 212/212L)

Math:

Math (6 credits, college algebra is minimum)

Additional Courses:

English (WRIT 101 and CRTW 201)
Speech or Technical Writing (BIOL 480)
Humanities and Social Sciences (15 credits)
Medical Terminology (at Tuskegee) (NUTR 227)

WHAT ELSE YOU CAN DO TO PREPARE FOR VET SCHOOL

The admissions process for vet school is highly competitive. Winthrop offers several opportunities for you to gain experience and skills that will help prepare you for vet school and distinguish yourself as an applicant. You should speak to an advisor about identifying opportunities at Winthrop and in the community. Opportunities available within the Biology Department include:

- Internships (BIOL 461 or 463)
- Undergraduate Research (BIOL 370, 371, 450H, 470, 471, 472)
- Bench to Bedside Program
- Tri-Beta Honors Society
- Honors Program and Honors Thesis
- Pre-Health Professions Student Organization Membership/Leadership
- SEA-PHAGES Program
- Health Professions Connection Blackboard Organization (provides supplemental advising and other helpful information, resources, and services for students planning to go into health professions)

Notes:

- (1) Veterinary Medicine. College of Charleston (2022). Retrieved from: <http://healthprof.cofc.edu/programs/veterinary/index.php>.
- (2) DVM Application Process. University of Georgia College of Veterinary Medicine (2022). Retrieved from: <https://vet.uga.edu/education/dvm-program/dvm-application-process/#accordion-content-0>.
- (3) Entrance Requirements. Mississippi State University College of Veterinary Medicine (2022). Retrieved from: <http://www.cvm.msstate.edu/academics/prospective-students/academic-requirements>.
- (4) Criteria for Admission. Tuskegee University College of Veterinary Medicine (2022): Retrieved from: <https://www.tuskegee.edu/programs-courses/colleges-schools/cvm/cvm-criteria-for-admissions>.