

Pharmacy Student Veterinary Compounding ONLINE COURSE + LAB

SYLLABUS | Summer 2026 | Online Portion Begins May 18

Course Description

This course trains students in providing comprehensive veterinary pharmacotherapy expertise, care, products and compounds for non-human patients. Reading assignments and online class participation will facilitate the generation of a learning community and multi-input discussions about case studies. Hands-on laboratory exercises will reinforce the learning experience. The full course consists of two components: an online component that contains approximately 4-6 hours of didactic work per week and a 2-day compounding laboratory experience at PCCA.



Requirements

Current enrollment in an accredited College/School of Pharmacy.

Recommended Online Resource

Plumb's Veterinary Drug Handbook online/app access is available to pharmacy students for \$19.95 per year – www.plumbsveterinarydrugs.com.

Student Learning Objectives

This introductory level course will prepare pharmacy students to effectively provide pharmaceutical expertise, care, products and compounds to non-human patients in a variety of career settings. Following completion of the course, participants will be able to:

- Apply principles of non-human species anatomy and physiology to drug disposition in non-human patients.
- Apply principles of disease state management in the 7 major non-food producing species of non-human patients.
- Analyze and apply toxicological potential of drugs, excipients, foods and household items to non-human patients.
- Communicate veterinary-specific health and drug related information to pet owners, veterinarians, professional colleagues and community groups.

Major areas of focus will include anatomy, physiology, drug disposition, species-specific toxicology and common diseases for 7 non-human species; case presentations and discussions of medication management; key concepts in veterinary compounding; prescription review and dispensing; and caregiver counseling for drug administration and monitoring in non-human patients.

The class format utilizes online independent study learning modules as well as live virtual discussions. These discussions will be used throughout the course to provide a hands-on, problem-solving team approach to managing veterinary patient cases through disease state and case presentations, compounding problems and exercises, prescription reviews and caregiver counseling for drugs dispensed to non-human patients.

Structure of the Course

Online Didactic Component

- 10 online modules punctuated with active learning exercises including live virtual discussions
- Discussion topics will vary in theme, and may require investigation, research, critical thinking, application of concepts and creative thinking
- Students unable to participate in live discussions must communicate this information prior to the scheduled events. Students with excused absences will be provided the opportunity to receive a discussion grade by submitting a research paper covering relevant compounding topics (details provided by course facilitator)

Module Content

- **Assigned readings:** Online modules and peer-reviewed articles
- **Assessments:** Multiple choice questions based on the readings (completed online)

Hands-on Laboratory Component

The Veterinary Compounding Lab will be conducted at the PCCA facility in Houston, Texas. The laboratory will consist of a two-day, hands-on experience (total of 16 hours) that investigates the interrelationship between veterinary pharmacotherapeutic principles and compounded formulations. Dosage forms included in the laboratory component are unique formulations specifically appropriate for veterinary patients.

Introductory Compounding Boot Camp is a prerequisite for attendance at the Veterinary Compounding Lab. Students enrolled in the Veterinary Compounding Online Course will be provided an opportunity to register for Boot Camp at a discounted price.

Course Grade

Assessments	30%	Weeks 1-10
Live Virtual Discussions	10%	Tuesday, May 26, 2026 (7:00-7:30 PM CT) – 30 mins
		Tuesday, June 9, 2026 (7:00-8:30 PM CT) – 90 mins
		Tuesday, June 30, 2026 (7:00-8:30 PM CT) – 90 mins
Midterm Exam	30%	Tuesday, June 23, 2026 (7:00-8:30 PM CT)
Final Exam	30%	Tuesday, July 21, 2026 (7:00-8:30 PM CT)
Lab Session at PCCA		July 27-28, 2026 (9:00 AM – 6:00 PM CT each day)
Total	100%	

Exams

The midterm and final exam will be administered online. If the scheduled exam dates or times need to be rescheduled due to an approved absence, this information must be communicated to the course facilitators at least 48 hours prior to the scheduled exam. If this information is not provided within the required 48 hours, the highest possible score a student could earn is 85%.

Certificate Award

To receive a certificate of completion:

1. Students must achieve a final grade of 80% or higher within the online course.
2. Students registered for the Veterinary Compounding Lab must successfully complete the entire laboratory experience.

Course Outline

1. Anatomy, Physiology and Drug Disposition for Non-Human Species
2. Principles of Toxicology for Non-Human Species
3. Providing Pharmaceutical Care and Compounds for Canine Patients
4. Providing Pharmaceutical Care and Compounds for Feline Patients
5. Providing Pharmaceutical Care and Compounds for Equine Patients
6. Providing Pharmaceutical Care and Compounds for Exotics (Ferrets & Rabbits)
7. Providing Pharmaceutical Care and Compounds for Exotics (Reptiles & Birds)
8. Hospice Considerations
9. Compounding Opportunities
10. Evaluation of Veterinary Prescriptions

Program Fee

\$995 – This fee includes access to online course material and all laboratory fees. Travel arrangements and costs are student responsibilities. PCCA offers a special student rate at our recommended hotel.

* Students may register for the 10-week, online-only course option for \$695.

Registration

Interested students are encouraged to register at <https://cvent.me/vl2yzy>. Students must complete the Introductory Compounding Boot Camp prior to attending the Veterinary Compounding Lab.

Students who have not completed the prerequisite Boot Camp course must contact the course instructor for approval. The course instructors may be reached at studenteducation@pccarx.com.

Original Course Content Developer

Gigi S. Davidson, BS, DICVP
Director of Clinical Pharmacy Services
College of Veterinary Medicine
North Carolina State University
Raleigh, NC 27606

For more information, please contact:

Bindhu Batra, PharmD, RPh
PCCA Director of Academic Affairs
bbatra@pccarx.com
832.295.4350

Jessica D. Messa, PharmD, RPh
PCCA Associate Director of Academic Affairs
jmessa@pccarx.com
832.295.4353