



Online Courses for High School Students
1-888-972-6237

Veterinary Science: The Care of Animals

Lions and tigers and bears (oh my!) Whether you want to step into the wild side of veterinary medicine or just take care of the furry dogs and cats down your street, Veterinary Science: The Care of Animals will show you how to care for domestic, farm, and wild animals and diagnose their common diseases and ailments. Learn how different veterinary treatments are used and developed to improve the lives of animals and, as a result, the lives of those people who treasure them. If you have always been drawn to the world of our furry, scaly, and feathered friends, this may be just the course for you!

Course Highlights

- Discover the workplace routine inside a vet office.
- Explore career options in the field of veterinary science.
- Investigate large animal and exotic animal care and treatments.
- Examine diseases and illnesses that can spread between humans and animals.

Prerequisite: None

Course Length: One Semester

Required Text: There are no required textbook for this course.

Materials List: There are no required materials for this course.

Course Outline:

Unit 1: Introduction to Veterinary Science

In this unit, we will learn what veterinary science is and about some of the ongoing research in the field. We will examine how veterinary scientists try to better understand animals' health and diseases as well as how veterinarians apply this knowledge to particular animals that they care for. We will also discuss the history of veterinary science, some of the areas that veterinary scientists are focusing on in their research, and some of the ethical considerations in veterinary research and science.

Unit 2: Small Animal Medicine

In this unit, we will discuss some common illnesses and diseases that dogs and cats experience. We will examine some of the diseases that affect the skeletal, nervous, endocrine, and gastrointestinal systems. We will also examine several viruses that can affect cats and dogs. In doing so, we will discuss some of the causes, symptoms, and treatments for these diseases.

Unit 3: Large Animal Medicine

In this unit, we will examine some of the diseases and conditions that affect livestock, including horses, cattle, and swine. We will discuss equine diseases such as colic and equine influenza, including what causes the diseases and how they are treated. We will examine diseases that can affect cattle, such as mad cow disease and foot-and-mouth disease. Finally, we will discuss several diseases that swine can suffer from, including swine pox and pseudorabies.

Unit 4: Exotic Animal Medicine

In this unit, we will discuss veterinary medicine for exotic animals, including those animals that are kept in zoological parks and sanctuaries. We will examine a few of the diseases that can affect birds and reptiles. We will discuss how these diseases are treated and what effects the diseases may have. We will also examine some of the differences that veterinarians and veterinary scientists deal with in treating exotic animals in comparison to domestic animals like dogs and cats.

Unit 5: Poisoning and Toxicology

In this unit, we will discuss the area of toxicology. Toxicology examines poisons, toxins, and other harmful substances, including how they affect various animal species and how veterinary medicine may treat these effects. We will examine some of the basic concepts in the study of toxins and then turn to investigate some of the common poisons and toxins that affect livestock and domestic animals. For each toxin, we will consider how the poisoning generally happens, what symptoms it can produce, and what veterinarians may do to treat the animal.

Unit 6: Veterinary Parasitology

In this unit, we will examine the area of veterinary parasitology, which studies parasites and their animal hosts. In doing so, we will learn more about the different types of parasites and the various ways in which animals can become infected with parasites. We will also investigate several different examples of common parasites, including coccidian parasites, heartworms, mites, and fleas. For each, we will discuss how the particular parasite can affect the host animal, how animals become infected with the parasite, and how the parasite might be eliminated from the animal.

Unit 7: Zoonotic Diseases

In this unit, we will learn more about zoonotic diseases or diseases that can be transferred from animals to humans. Some of these diseases can be deadly for humans so they are of great concern to veterinary scientists and public health officials. In this unit, we will examine four zoonotic diseases, including Hantavirus, plague, anthrax, and ringworm. In doing so, we will learn more about how these diseases are transferred to humans, the symptoms of the diseases, and how these diseases are treated or prevented.

Unit 8: Holistic Veterinary Science and Medicine

In this unit, we will learn more about some of the holistic treatments that are currently being used in veterinary medicine. Although few studies have been done on the effectiveness and safety of these treatments, more attention is being paid to this area of research as their use increases. We will discuss holistic treatments like acupuncture, herbal medicine, and hydrotherapy. In doing so, we'll talk about some of the benefits of these types of treatments, what they are used for, and what research has been done on the effectiveness of the treatments.