Science Department
Textbook Adoption Request
Animal Science 3 and 4

Title of Book:

Introduction to Veterinary Science
Authors: James B. Lawhead and MeeCee Baker
Copyright: 2009

Publisher:

Delmar, Cengage Learning
Delmar
Clifton Park, NY 12065

www.agriculture.delmar.com

Price: $115.95

Readability:

A Flesch-Kincaid readability test was conducted on portions of this text and it was found to be written at a 10th grade reading level. The content of this book is appropriate for an introductory course in animal science and/or veterinary technology.

Freedom From Bias:

The textbook is free from bias with respect to gender and nationality.

Suitability to the Current Planned Course:

This textbook is being proposed for the Animal Science Three and Four course to assist students with the veterinary science portion of this course. Students will also be studying large animals in more detail in this course, so the text will be supplemented with other materials in some situations to remain current and relevant to the large animal species and industries that we will be discussing. This text will help students to understand the animal systems and give visual examples of anatomy, tools students will use for veterinary procedures, and diseases associated with the different animal systems. Each of the chapters gives a clinical practice section to show students what situations they will have to understand each animal system for, calculations they may have to use in certain situations and basic descriptions of common veterinary procedures.

Attachment XVII-3B-1

Relationship to other science and math courses:

This text covers many concepts that expand on biology and math concepts that are taught in other classes. The students will understand the following through interacting with this text:

- Connect cellular parts and function to clinical veterinary practice.
- Compare epithelial, connective, muscle, and nerve tissues.
- Explain how bone grows and remodels as well as how bone and muscle groups relate to movement.
- Use knowledge of heart function and control to explain the clinical significance of the electrocardiogram; heart sounds, including heart murmurs; and blood pressure.
- List and discuss the function and control of breathing.
- Name and explain the functions of the renal system as well as evaluate urine and blood as a measure of the health of the animal and the urinary system.
- Compare and contrast the specialization of dentition and digestive tracts found in the various domestic species, and define symbiosis and its significance in the ruminant.
- List the steps in establishing pregnancy and identify the stages of parturition.
- Compare and contrast the function of the sensory somatic system to the autonomic nervous system and differentiate between the two branches of the autonomic system.
- Name the major endocrine glands, list the hormones secreted by each gland, and describe the functions of these hormones.
- Distinguish between passive and active immunity, differentiate between humoral and cellular immunity and their relationship in immunity, and explain primary and secondary immune response.
- List the six major components of animal diets, and discuss their structure and significance in nutrition.
- Compare the monogastric, modified monogastric, and ruminant's ability to digest food and their nutritional requirements.
- Describe Koch's Postulates of disease
- Describe the types of vaccines available and their roles in disease prevention along with other disease prevention techniques.
- Classify diseases, match them with the domestic species in which they occur, and discuss their clinical significance.
- List and describe several diseases common in domestic animals that are contagious to humans.
- List the major methods used to diagnose disease and cite examples of disease diagnosis with each testing method.
- Explain the clinical significance of the basic principles of successful surgery.

Durability and Appearance:

The textbook is hardbound and durable. There are many real photographs showing animal parts, tools and equipment used in the veterinary field, and diagrams showing anatomy of animal systems. The size of the text is average but appropriate and readable.

Resources:

This book references many websites online for students to view virtual procedures. A lab manual is also available with this text to provide hands on activities related to the content.

Examination of this textbook was completed by the undersigned:

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