

Student's Name _____ Veterinary Science AG 590

Directions: Evaluate the trainee using the rating scale below and check the appropriate number to indicate the degree of competency achieved. The numerical rating of 3, 2, 1 and 0 are not intended to represent the traditional school grading system of A, B, C, D and F. The descriptions associated with each of the numbers focus on level of student performance for each of the tasks listed below.

Rating Scale: 0 – No exposure – no information nor practice provided during training program, complete training required.

1 – Exposure only – general information provided with no practice time, close supervision needed and additional training required.

2 – Moderately Skilled – has performed independently during training program, limited additional training may be required

3 – Skilled – can perform independently with no additional training

1. Number of Competencies Evaluated _____
2. Number of Competencies Rated 2 or 3 _____
3. Percent of Competencies Attained (2/1) _____

Grade

Instructor Signature

Date

01.0 Basic Cell Biology

The student will be able to:

0 1 2 3

- 01.01 Explain the molecular makeup of cells
- 01.02 Identify the basic structures of the cells and their corresponding functions
- 01.03 Review the basic function of the cell
- 01.04 Describe the process of protein synthesis
- 01.05 Discuss mitosis and its clinical significance in diseases such as cancer
- 01.06 Detail meiosis in mammalian reproduction
- 01.07 Connect cellular parts and function to clinical veterinary practice

02.0 Tissue Types and Functions

The student will be able to:

0 1 2 3

- 02.01 Describe the properties, location, functions and varieties of epithelial tissues
- 02.02 Describe the properties, location, functions and varieties of connective tissues
- 02.03 Describe the properties, location, functions and varieties of muscle tissues
- 02.04 Describe the properties, location, functions and varieties of nerve tissues
- 02.05 List knowledge of tissues to clinical practices

03.0The Musculoskeletal System

The student will be able to:

0 1 2 3

- 03.01 Describe the functions of the musculoskeletal system
- 03.02 Detail the structure of bone
- 03.03 Name joint types and their accompanying roles in movement
- 03.04 List the two major sections of the skeleton, name the corresponding bones, and compare species differentiation
- 03.05 Explain how bones grow and remodel
- 03.06 Relate bone and muscle groups to movement
- 03.07 Connect the text materials pertaining to the musculoskeletal system to clinical practice

05.0The Respiratory System

The student will be able to:

0 1 2 3

- 05.01 Identify the basic components of the respiratory tract
- 05.02 List and discuss the function and control of breathing
- 05.03 Discuss the clinical significance of the academic material learned in this chapter

07.0The Digestive System

The student will be able to:

0 1 2 3

- 07.01 Identify the basic structures of the digestive system
- 07.02 Explain digestion in monogastrics, including: exocrine secretions and functions, digestive tract function, digestive tract absorption and role of the liver in digestion and metabolism.
- 07.03 Compare and contrast the specialization of dentition and digestive tracts found in the various domestic species, and define symbiosis and its significance in ruminant
- 07.04 Discuss the clinical significance of the academic material learned in this chapter

04.0The Circulatory System

The student will be able to:

0 1 2 3

- 04.01 List blood components and explain the functions of blood
- 04.02 Identify the basic structures of the mammalian heart
- 04.03 Trace the flow of blood through the heart and body while detailing the parts of blood vessels and their structural significance
- 04.04 Use knowledge of heart function and control to explain the clinical significance of the electrocardiogram; heart sounds, including heart murmurs; and blood pressure
- 04.05 Discuss the clinical significance of the academic material learned in this chapter

06.0The Renal System

The student will be able to:

0 1 2 3

- 06.01 Identify and name the basic structures in the renal system
- 06.02 Name and explain the functions of the renal system
- 06.03 Identify structures within the kidney and detail the formation and regulation of urine
- 06.04 Evaluate urine and blood as a measure of the health of the animal and the urinary system
- 06.05 Discuss the clinical significance of the academic material learned in this chapter

08.0The Reproductive System

The student will be able to:

0 1 2 3

- 08.01 Identify male anatomy and relate associated hormonal function
- 08.02 Discuss female anatomy and the estrous cycle
- 08.03 List the steps in establishing pregnancy and identify the stages of parturition
- 08.04 Discuss the clinical significance of the academic material learned in this chapter

09.0The Nervous System

The student will be able to:

0 1 2 3

- 09.01 Describe the neuron, the nerve impulse and the synapse and explain the components of a reflex arc
- 09.02 Identify the major structure of the brain and name associated functions
- 09.03 Discuss the anatomy and function of the spinal cord
- 09.04 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
- 09.05 Discuss the clinical significance of the academic material learned in this chapter

11.0The Immune System

The student will be able to:

0 1 2 3

- 11.01 Define the term *antigen* and explain its significance in immunity
- 11.02 Distinguish between passive and active immunity, differentiate between humoral and cellular immunity and their relationship in immunity and explain primary and secondary immune response
- 11.03 Discuss the clinical significance of the academic material learned in this chapter

13.0Species Comparison

The student will be able to:

0 1 2 3

- 13.01 Explain the general principals in animal nutrition
- 13.02 Describe the important features found on pet food labels and compare and contrast the nutritional requirements for dogs and cats
- 13.03 Discuss the horse's ability to digest fiber and the role in equine nutrition
- 13.04 Detail the ruminant's ability to digest fiber and its role in ruminant nutrition
- 13.05 Link the clinical significance of the academic material learned in this chapter to veterinary practice

10.0The Endocrine System

The student will be able to:

0 1 2 3

- 10.01 Describe the endocrine system
- 10.02 Name the major endocrine glands, list the hormones secreted by each gland, and describe the functions of these hormones
- 10.03 Discuss the clinical significance of excesses or deficiencies of endocrine-related hormones

11.0Basic Nutrients

The student will be able to:

0 1 2 3

- 12.01 List the major components of animal diets, and discuss their structure and significance in nutrition
- 12.02 Discuss the clinical significance of the academic material learned in this chapter

14.0Principals of Infectious Disease

The student will be able to:

0 1 2 3

- 14.01 Describe Koch's postulates
- 14.02 List the important distinguishing features and give examples of major disease agents and discuss the resulting disease
- 14.03 Relate text material to common presentations

15.0Disease Prevention

The student will be able to:

0 1 2 3

- 15.01 Name the basic components of disease prevention
- 15.02 Describe the types of vaccines available and their roles in disease prevention
- 15.03 Link the clinical significance of the academic material learned in this chapter to veterinary practice

16.0 Classification of Diseases

The student will be able to:

0 1 2 3

- 16.01 Classify diseases, match them with the domestic species in which they occur, and discuss their clinical significance

18.0 Diagnosis of Disease

The student will be able to:

0 1 2 3

- 18.01 List the major methods used to diagnose disease and cite examples of disease diagnosis with each testing method
- 18.02 Discuss the clinical significance of disease diagnosis

17.0 Zoonoses

The student will be able to:

0 1 2 3

- 17.01 List and describe several diseases common in domestic animals that are contagious to humans
- 17.02 Relate the academic material learned in this chapter to clinical practice

19.0 Principals of Surgery

The student will be able to:

0 1 2 3

- 19.01 Explain the clinical significance of the basic principles of successful surgery
- 19.02 Explain the clinical significance of healing of lacerations by first and second intention
- 19.03 Explain the clinical significance of common considerations in veterinary surgeries

