**High Plains Technology Center**

**Health Careers**

**Learning Activity Packet (LAP) for Veterinary Assistants**

**Related unit of instruction:**

Diagnostic Procedures for the Veterinary Assistant

**Approximate Completion time:**

15 hours

**Rationale for the Lap:**

This LAP is designed to prepare the student to perform basic laboratory and diagnostic procedures in the veterinary office.

**Criteria for successful completion:**

By the end of this LAP the student will

1. Read and turn in work sheets for Chapters 10-11 in Sirois’ *Veterinary Assisting Textbook*, Workbook and text, Elsevier, 2013.
2. Pass the tests for the chapters

**Learning Objective:**

Laboratory Procedures Chapter 10

1. Describe methods used to collect samples for laboratory examination.
2. Describe the preparation of diagnostic samples for laboratory examination.
3. List and describe common procedures used for hematologic examinations.
4. List and describe methods for evaluation of hemostasis in dogs and cats.
5. List and describe equipment needed for clinical chemistry and serology testing.
6. List and describe the types of tests used in clinical chemistry testing.
7. List the biochemical assays commonly performed to asses liver, kidney and pancreatic function.
8. List the types of immunologic tests and describe the test principles used in those tests.

Diagnostic Imaging Chapter 11

1. Describe the components of the x-ray machine and the function of each part.
2. Explain how x-rays are produced.
3. Discuss the factors that affect radiographic quality.
4. Describe techniques and devices used to optimize radiographic quality.
5. Discuss the dangers of radiation and methods to avoid radiation injury.
6. Describe the procedures used to develop radiographs.
7. Explain proper positioning of animals for various radiographic studies.
8. Describe the basic physics of ultrasound.
9. List the components of ultrasound machines and the function of each part.
10. List the non-x-ray imaging modalities and provide an overview of each.