

M: Course Objectives / Learning Outcomes:

Upon completion of AHTT 1102 - Veterinary Laboratory Procedures I, the student will be able to:

1. Prepare and maintain a veterinary practice laboratory.
2. Utilize common laboratory equipment, including the compound microscope, refractometer and centrifuge.
3. Employ additional instrumentation used in microbiology, haematology and parasitology, such as blood chemistry analyzers, electronic cell counters, and incubators,
4. Be competent in the calibration of a compound microscope.
5. Demonstrate recognition of quality control methods.
6. Value and practice safety in the laboratory.
7. Identify the major parasites of small and large animals.
8. Appreciate the life cycles, zoonotic potential and control methods for these parasites.
9. Perform diagnostic tests routinely used in veterinary parasitology.
10. Know the techniques used to obtain haematological samples, including those for blood chemistry analysis.
11. Understand the function, formation and abnormalities of components of blood.
12. Perform routine testing used in haematology, such as complete blood count.
13. Complete laboratory submission forms and be familiar with sample preparation for submission.
14. Identify and perform steps required for a complete urinalysis.

N: Course Content:

The major topics in the course include the following:

1. Introduction to Laboratory Equipment
 - function, operating procedures, care and maintenance of binocular microscope
 - calibration of instrumentation
 - use of refractometer and centrifuge
 - familiarization with spectrophotometer and other miscellaneous equipment
2. Parasitology:
 - life cycles of internal and external parasites common in veterinary medicine
 - control and zoonotic potential of these parasites
 - diagnostic techniques, and gross and microscopic identification
3. Clinical Pathology Part I (Haematology):

