



## Tennessee Specific Industry Certification Animal Science Content Area Resource

This Tennessee Specific Industry Certification (TSIC) resource provides additional guidance as you prepare your veterinary and animal science instructional materials. The general knowledge and skills are provided as a guide for developing lessons and lab activities that lead to deeper understanding of content. The list of sample terms are just that, a list of sample terms that will be helpful to build each student's knowledge base for this content area.

### **General knowledge and skills for Clinical Lab Procedures**

- Describe proper techniques to collect specimens for laboratory analysis.
- Distinguish between the different types of test tubes used for specific blood samples.
- Describe proper techniques to package, handle, and store specimens for laboratory analysis.
- Recognize the most common internal parasite of small ruminants.
- Recommend imaging technology to effectively and efficiently diagnose an illness.
- Summarize required personal protective equipment for laboratory conditions.
- Determine the total magnification of an image viewed through a microscope.

### **Sample terms associated with content area**

- Adult Parasites
- *Ancylostoma caninum*
- Anemometer
- Antisepsis
- Blood sample
- Blood serum
- Bone density
- Centrifuge
- Complete blood chemistry panel
- Complete blood count
- Cystocentesis
- Developing larva
- Disinfection
- DNA
- Domestic animal
- Eye protection
- Face mask
- Fecal sample
- Freezer
- Fumigation
- Green topped tubes
- *Haemonchus contortus*
- Immunocompromised
- Internal parasite
- Iodine scrub
- Lab coat
- Larvae
- Lethargic
- Magnetic Resonance Imaging (MRI)
- Magnification
- Microscope
- Microscope eyepiece
- Microscope objective.
- Necropsy
- Nucleus
- Otoscope
- Parasite egg
- Parasite larva
- Parasite ova
- PCR testing
- Purple topped tubes
- Red blood cells
- Red topped tubes
- Refrigerator
- Ribosome



## Tennessee Specific Industry Certification Resource Topics and Terms

- Room temperature
- Rubber boots
- Small ruminants?
- Sterilization
- Total magnification
- *Toxocara canis*
- *Trichuris vulpis*
- Urine sample
- Warm water bath
- Whole blood
- Zoonotic disease