



**Veterinary Science**

**CIP 01.8301**

# **PROGRAM OF STUDY**

**CURRICULUM MAPPING  
WITH  
CERTIFICATION OUTCOMES**

Mon Valley Career & Technology Center prepares all students to attain their fullest potential for employment, to be life long learners, and to be productive and responsible members of an ever-changing society.

**Objective:**

This document has been prepared to project student learning outcomes in a linear fashion over the approved 3-year program of study.

**Overview:**

This document provides a Pennsylvania Department of Education and Mon Valley CTC Occupational Advisory Committee approved list of tasks and learning objectives that are broken out into a linear form for a better understanding of learning outcomes over a three year period within each program. It also serves as curriculum map as students work towards completing knowledge and skill-based tasks in pursuit of industry credentials. The end goal within each program is to work towards completing all tasks at proficient and advanced levels, earning multiple (stackable) industry credentials, and successfully complete the NOCTI exam. Student's progression and completion of task(s) and industry certification(s) may vary.

**Navigation:**

**Unit / Task #** - This column indicates the Pennsylvania Department of Education or Mon Valley CTC local unit or task numbers given to each task within a given duty area.

**Task Description** – This column explains what knowledge-based or skill-based task that a student is working on for completion.

**Level / Marking Period** – This column indicates the learning level and timeframe at which the specific task(s) will be introduced to the student(s). Note that some tasks may be taught and completed individually while others may be taught in groups. ( i.e. 1.1 would signify a first year student being introduced to this task(s) in the first marking period, 2.3 would signify a second year student being introduced to this task(s) in third marking period, etc.)

**Industry Certification:**

Students successfully progressing through the curriculum and tasks have opportunity to test for industry credentials. Industry credentials are listed on the right side of the document at the appropriate time within the curriculum that a student would be fully prepared to test for that certification.



# Program of Study Mapping with Certification Outcomes

## Veterinary/Animal Health Technology/Technician and Veterinary Assistant CIP 01.8301

Student Level/Marking Period	Task Number and Description	Certifications
Level 1/Quarter 1	101 Differentiate between the tasks and roles of veterinary team members. 102 Differentiate between the professions within the veterinary industry. 103 Differentiate between the areas within the veterinary facility. 104 Recognize normal and abnormal animal behavior patterns. 105 Follow personal safety measures, including personal protective equipment (PPE). 106 Identify potential zoonotic diseases. 107 Follow isolation procedures. 108 Differentiate between disposal of various types of hazardous material. 109 Practice sanitation and disinfection techniques within the veterinary facility. 110 Follow OSHA standards. 111 Solve basic medical math necessary for the profession. 112 Comply with veterinary practice, local, state, and federal laws.	
Level 1/Quarter 2	301 Use verbal and written client communication. 302 Follow ethical rules of conduct in the veterinary profession. 304 Demonstrate knowledge of the human-animal bond. 305 Demonstrate professional appearance and language in the workplace. 306 Use electronic devices/communications according to workplace policies, e.g., cell phone usage, text messaging, social networking, digital photography.	Fear Free Certification
Level 1/Quarter 3	201 Greet clients. 202 Schedule appointments. 203 Prepare forms and certificates. 204 Admit a patient. 205 Discharge a patient. 206 Perform basic filing and retrieving of medical records. 207 Perform basic veterinary medical record keeping procedures. 208 Use veterinary software programs. 209 Utilize veterinary medical terminology and abbreviation. 210 Invoice, bill, and collect payment on account procedures. 211 Answer and direct phone calls. 212 Recognize and respond appropriately to veterinary medical emergencies by notifying the appropriate hospital personnel. 213 Request and transfer records to and from other veterinary facilities. 214 Manage basic inventory supplies and restock shelves, e.g., office supplies, retail	



## Program of Study Mapping with Certification Outcomes

	supplies.	
Level 1/Quarter 4	<p>601 Provide routine record keeping and observation of hospitalized patients.</p> <p>602 Utilize terminology, illustrate the structure and function, and describe common diseases of the sensory system.</p> <p>603 Utilize terminology, illustrate the structure and function, and describe common diseases of the integumentary system.</p> <p>604 Utilize terminology, illustrate the structure and function, and describe common diseases of the skeletal system.</p> <p>605 Utilize terminology, illustrate the structure and function, and describe common diseases of the muscular system.</p> <p>606 Utilize terminology, illustrate the structure and function, and describe common diseases of the respiratory system.</p> <p>607 Utilize terminology, illustrate the structure and function, and describe common diseases of the circulatory system.</p>	
Level 2/Quarter 1	<p>608 Utilize terminology, illustrate the structure and function, and describe common diseases of the immune system.</p> <p>609 Utilize terminology, illustrate the structure and function, and describe common diseases of the digestive system.</p> <p>610 Utilize terminology, illustrate the structure and function, and describe common diseases of the urinary system.</p> <p>611 Utilize terminology, illustrate the structure and function, and describe common diseases of the endocrine system.</p> <p>612 Utilize terminology, illustrate the structure and function, and describe common diseases of the reproductive System.</p> <p>613 Utilize terminology, illustrate the structure and function, and describe common diseases of the nervous system.</p> <p>614 Monitor/restrain patients for fluid therapy and record observations.</p> <p>615 Administer oral medication to a dog and a cat.</p> <p>616 Administer ear medication to a dog and a cat.</p> <p>617 Administer eye medication to a dog and a cat.</p> <p>618 Follow patient treatment plan.</p> <p>619 Locate and lay out materials needed for bandage application.</p>	OSHA
Level 2/Quarter 2	<p>620 Select, identify, and use grooming equipment.</p> <p>621 Comb and brush patients.</p> <p>622 Clean external ear canals.</p> <p>623 Trim nails of a patient.</p> <p>624 Identify location of and problems associated with anal glands.</p> <p>625 Bathe a patient.</p> <p>626 Dip a patient.</p> <p>627 Prepare food according to treatment plan.</p> <p>628 Clean and disinfect a kennel and cage.</p> <p>629 Provide care and maintenance of nursing equipment.</p>	<p>Pet First Aid</p> <p>Recover CPR</p>



## Program of Study Mapping with Certification Outcomes

	630 Identify procedures and process of euthanasia and postmortem care. 631 Evaluate capillary refill time (CRT) and assess normal mucous membranes.	
Level 2/Quarter 3	801 Collect voided urine samples. 802 Determine physical properties of urine, including color and clarity. 803 Prepare urine sediment for microscopic examination. 804 Identify common blood tubes used in veterinary medicine. 805 Prepare supplies for blood collection. 806 Set up a packed cell volume (PCV). 807 Set up a sample using a refractometer. 808 Assist in preparation of specimen staining techniques. 809 Collect voided fecal samples for examination. 810 Prepare a fecal direct smear for analysis. 811 Prepare a fecal flotation for analysis. 812 Prepare a fecal centrifugation for analysis. 813 Identify external parasites, e.g., mites, lice, fleas, ticks. 814 Assist with necropsy procedures. 815 Identify the state-level requirements for rabies suspects. 816 Handle disposal of deceased animals.	
Level 2/Quarter 4	401 Recognize legal issues involving all controlled and non-controlled drugs. 402 Differentiate between the various pharmaceuticals and their classifications. 403 Interpret the terminology of a prescription. 404 Differentiate between over the counter and prescription drugs. 405 Formulate a prescription label with all necessary components. 406 Prepare and package dispensed drugs. 407 Store, handle, and dispose of drugs according to manufacturer's directions. 408 Apply inventory control techniques. 409 Reconstitute vaccines and follow proper protocols. 410 Differentiate restraint techniques according to routes/methods of drug/vaccine administration.	ACT Veterinary Assistant 1
Level 3/Quarter 1	501 Place small animals in and remove from cages. 502 Place and restrain small animals on tables and floor. 503 Apply dog and cat commercial muzzle. 504 Apply dog gauze muzzle. 505 Apply Elizabethan collar. 506 Apply restraint pole. 507 Demonstrate standing, sitting, lateral, sternal, and dorsal restraint positions. 508 Demonstrate restraint techniques for femoral, cephalic, jugular, and saphenous veins on a dog and a cat. 509 Identify situations requiring alternative restraint techniques, e.g., ringworm, geriatric, ectoparasite infestation. 510 Determine and record temperature, pulse, heart rate, respiration, body condition score, and patient weight.	



## Program of Study Mapping with Certification Outcomes

	<p>511 Identify common AKC dog breeds and CFA cat breeds.</p> <p>512 Identify the gender of cats and dogs.</p> <p>513 Identify small animal nutritional requirements, e.g., AAFCO, prescription diet, dry matter basis calculations.</p> <p>514 Take animal history and report chief complaint (SOAP format).</p>	
Level 3/Quarter 2	<p>701 Prepare surgical equipment and supplies.</p> <p>702 Sterilize instruments and sanitize supplies.</p> <p>703 Operate and maintain autoclaves.</p> <p>704 Identify common instruments.</p> <p>705 Identify common suture materials, types, and sizes.</p> <p>706 Assist with preparation of patients using aseptic technique.</p> <p>707 Assist with positioning of surgical patients.</p> <p>708 Assist with post-operative patient care.</p> <p>709 Maintain the surgical log.</p> <p>710 Maintain proper operating room conduct and asepsis.</p> <p>711 Perform post-surgical clean up.</p> <p>712 Fold surgical gowns and drapes.</p> <p>713 Maintain operating room sanitation and care.</p> <p>714 Clean and maintain surgical instruments.</p>	<p>ACT Veterinary Foundations</p> <p>ACT Kennel Assistant</p> <p>ACT Veterinary Receptionist</p>
Level 3/Quarter 3	<p>901 Practice radiological exposure protocol.</p> <p>902 Assist the veterinarian and/or technician in diagnostic imaging including, restraint, preparation, positioning of patients, and processing images.</p> <p>903 Care for radiology equipment and maintain quality control.</p> <p>904 Maintain a radiology log.</p>	ACT Veterinary Assistant 2
Level 3/Quarter 4	MV01 Task Remediation / NOCTI Test Preparation	NOCTI