Course Information Form (CIF)

Course Code: VTT 214
Course Title: Laboratory Animals

Department: Allied Health
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 01.8301
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 1-2-2
Credit Hour Distribution:

Lecture: 1	Lab: 2	Clinical: 0	**Total: 2**

General Course Information

Catalog Description

Introduction to the care and use of laboratory animals with discussion of correct sanitation procedures, laboratory animal handling, anatomical differences, clinical pathology, common diseases and treatment, and laboratory animal facility procedures and equipment.

General Course Objectives

Demonstrate knowledge of procedures for laboratory animals, including sanitation, laboratory animal handling, anatomical differences, clinical pathology, common diseases, and treatment.

Minimum Placement Levels

English	Reading	Math
Placement out of ENG 099	Placement out of CCS 099	Placement out of MAT 072

Prerequisites

Credit in VTT 118
Admission into the Veterinary Technology program

Methods of Evaluation

2-3 written examinations, 8-10 quizzes, and 3-4 practical examinations.

Instructional Materials and Additional Supplies

None.

Course Content

General Learning Outcomes (GLOs)

- Communication: Students will demonstrate the ability to read, write, listen, and speak effectively.
- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Introduction, Restraint, and Experimental Design	1. Demonstrate how to safely restrain laboratory species. 2. Describe how experimental variables are controlled.	1	2	0
Explain and Set Up Fungal Test Kits and Exam Prepared Slides	1. Demonstrate use of and interpret the Fungassay Dermatophyte kits.	0.5	1	0
Laws	1. Describe knowledge of regulatory statutes concerning animal welfare and public welfare including federal laws, state laws, and USDA.	0.5	0	0
Organizations	1. Describe knowledge of organizations and their titles, membership, and functions.	0.5	2	0
Breeds, Strains, and Animal Uses	1. Describe and identify commonly used breeds in research including rodents, amphibians, avians, reptiles, primates, and rabbits.	1	2	0
Housing and Care	1. Describe the physical care of common lab species and environment of a lab animal facility.	1	2	0
Animal Identification	1. Explain and show identification methods used for each species.	1.5	2	0
Reproduction and Terminology	1. Explain terminology associated with breeding, genetics, vectors, and disease transmission. 2. Explain and show reproduction of various laboratory animal species.	0.5	1	0
Nutrition	1. Explain and show basic dietary requirements of each group of animals.	0.5	2	0
Quarantines and Shipping of Animals	1. Explain and show shipping quarantines and precautions, including quarantine guidelines and health certificates.	1	2	0
Avians	1. Explain and show husbandry, treatment, restraint, and anesthesia of birds. 2. Describe avian diseases.	1	2	0
Primates	1. Explain primate restraint, physical examination testing, diet, common diseases, immunization procedures, and reproduction. 2. Identify primate groups used in research.	3	2	0
Laboratory Animal Diseases	1. Explain lab animal medicine, including the most commonly occurring conditions encountered in a research facility. 2. Describe physiological data profiles for common types of laboratory animals.	0.5	0	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Anesthesia and Euthanasia	1. Identify the commonly used anesthetics. 2. List the principles used in euthanasia, methods used in euthanasia, and reasons for euthanasia.	0	4	0
Anatomical Differences	1. Explain and show the anatomical and physiological differences between the mouse, rat, hamster, gerbil, guinea pig, rabbit, monkey, birds, and primates.	0.5	2	0
Gnotobiology	1. Explain the definition and differences between gnotobiology, germ-free, axenic, pathogen-free, specific pathogen-free, and COBS and germ-free setups and transfers.	1	0	0
Reptiles and Amphibians	1. Explain and show husbandry, diet, anatomy, handling, sexing, and non-infectious diseases in common reptile and amphibian species.	0	2	0
Endoparasites, Ectoparasites, and WBC Counts	1. Identify white cells and parasite ova for the common laboratory animal species.	1	2	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
15	30	0