

VETT 204
Laboratory Animal Science
3 Credits

Community College of Baltimore County
Common Course Outline

Description

VETT 204 – Laboratory Animal Science: focuses on the basic principles of animal research and describes the safe and effective handling of common laboratory animals. Discussion includes husbandry and clinical techniques specific to laboratory animals. Emphasis is on providing quality animal care, monitoring their health and well-being, and understanding ethical issues surrounding animal research. Federal, state, and local animal welfare regulations are discussed. Husbandry, behavior, restraint, reproduction, and common diseases of avian, exotic, and small mammal species, in a clinical or zoological setting, are reviewed. Topics include sanitation, disease prevention techniques, diagnostic sampling, and medication procedures.

Pre-requisite(s): VETT 208, VETT 209, VETT 222, VETT 223

Overall Course Objectives

Upon completion of this course, students will be able to:

1. demonstrate restraints and husbandry for laboratory animals (mice, rats, rabbits, and non-human primates);
2. demonstrate restraints and husbandry for avian, exotic, and small mammals (birds, reptiles, amphibians, guinea pigs, hamsters, gerbils, ferrets, and chinchillas);
3. discuss zoologic and aquarium care;
4. apply hematologic and serum biochemical data of various laboratory animals, and avian, exotic, and small mammals;
5. discuss and perform serological testing and quality control;
6. apply regulations and policies governing the care and use of laboratory animals, and avian, exotic, and small mammals;
7. apply methods of specimen collection;
8. perform venipuncture and injections on laboratory animals; and
9. demonstrate methods of administering medications to various laboratory animals, and avian, exotic, and small mammal species.

Major Topics

- I. The mouse
- II. The rat
- III. The gerbil
- IV. The hamster
- V. The guinea pig
- VI. The chinchilla
- VII. The rabbit

The Common Course Outline (CCO) determines the essential nature of each course.
For more information, see your professor's syllabus.

- VIII. The ferret
- IX. The non-human primate
- X. Amphibians
- XI. Avians
- XII. Serologic testing and quality control
- XIII. Regulations and policies governing the use and care of laboratory animals
- XIV. Regulatory bodies and their functions, including USDA and IACUC
- XV. Management and nutrition (husbandry)
- XVI. Principles of treatment and preventive medicine

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Two examinations
- Required attendance at off-site locations for laboratory and zoo animals (included in internship practicum hours)

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the most current APA format.

Other Course Information

An overall grade of "C" (70%) or higher is required for satisfactory completion of the course.

Date Revised: 3/4/2025