



AGRI 2205

Division: Natural Science and Mathematics

Department: Agriculture

Course: AGRI 2205

Title: Anatomy and Physiology of Domestic Animals Lab

Catalog Description:

This laboratory setting allows students to physically examine domestic animal tissues, organs, and systems.

General Education Requirements: Life Science

Semesters Offered: Fall

Credit/Time Requirement: Credit: 1; Lecture: 0; Lab: 2

Clock/Hour Requirements: 0

Offered for Non-Credit: No

Corequisites: AGRI 2200

Justification:

This lab together with AGRI 2200, is a prerequisite class for many of the animal science and related majors. It is a major class for pre-vet and nutrition students. It gives students the opportunity to see real animal parts and to investigate their location and function as they study physiology. This class is equivalent to ADVS 2200 at USU.

Student Learning Outcomes:

As a result of taking this course, students will:

- be able to use a light microscope to find tissues
- be able identify basic animal tissues from slide observation
- be able to identify and know the function of the bones of a animal skeleton
- be aware of the function of the cardiopulmonary system and be able to trace blood flow
- be able to locate the major parts of the brain, explain animal senses and give several examples of their function
- be able to dissect the digestive tract of a ruminant and non-ruminant and describe location and function of the various organs
- know the various parts of the reproductive tract (male and female) and be able to explain their function
- be able to dissect a turkey and locate and describe the function of the various organs.

Content:

AGRI 2205 covers the following topics

- Body systems
- Tissues

- Skeletal system
- Brain and senses
- Nervous system
- Blood and circulatory system
- Lungs and pulmonary system
- Digestive systems of ruminant and non-ruminant animals
- Reproductive systems
- Poultry dissection

In addition to the lab assignments the class makes a visit to a veterinary diagnostic lab to observe the work of a veterinarian. There is also a final project completed by each student which should explain or demonstrate visually some principle of anatomy and physiology that we have covered.

*Arrangements have been made with the State Department of Agriculture to obtain organs from livestock slaughter for examination.

General Education Outcomes:

2) Write clearly, informatively, and persuasively.

Lab reports are written up describing observations, making explanations, and drawing conclusions.

Descriptions including the location, appearance, and function of many body tissues, organs and structures are written. These lab write-ups are evaluated by the instructor for clarity, terminology and obvious spelling and grammar mistakes. With this feedback, quality of their written work is expected to improve. Reports on the five senses are also written up as a lab assignment and then are orally presented to the class. This helps students organize material and verbally present it and practice the terminology.

Key Performance Indicators:

Students receive grades based on two criteria:

- Lab report summaries which are graded on a scale of 1-25: 60%
- Scores from a midterm and a final test which tests the identification of animal body parts and tissues: 40%

Representative Text and/or Supplies:

No required text. Individual lab handouts will be provided by the instructor.

Optimum Class Size: 24

Maximum Class Size: 24

Signatures:

I hereby submit this course syllabus:

Jack Anderson, , Professor

I hereby find this course consistent with the goals and resources of the Agriculture Department:

, , , Chair

I hereby find this course consistent with the goals and resources of the Natural Science and Mathematics Division:

Dan Black, EdD, Associate Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)