

# APPLIED ANIMAL SCIENCE (AAS)

Applied Animal Science (AAS) provides students with hands-on practical skills combined with knowledge and understanding of the latest technology. The core program offers a solid background in anatomy, physiology, nutrition, health, and animal breeding. The curriculum is focused on animal agriculture and emphasizes decision-making, technologies, and processes that address the realities of modern agriculture.

Practical learning experience is provided at the [Thomas P. Fairchild Dairy Teaching and Research Center](#) and the [UNH Organic Dairy Farm](#). The Thompson School also operates its own veterinary clinic and biology laboratories. The curriculum has a number of animal-related educational partnerships that include field trips to numerous animal-related businesses.

<https://colsa.unh.edu/thompson-school-applied-science>

## Programs

- [Applied Animal Science \(A.A.S.\)](#)

## Courses

### Applied Animal Science (AAS)

#### AAS 421 - Large Animal Behavior and Handling Techniques

**Credits:** 2

Introduction to domestic large animal behavior and handling techniques. Cattle, horses, swine, and sheep are used in this course. Students perform routine health-related procedures and gain valuable hands-on skills and safe animal handling techniques which can be applied to the fields of veterinary medicine, animal research, commercial agriculture, and animal control. 1 lec/1 lab.

**Equivalent(s):** AAS 221, ANSC 408, ANSC 508

**Grade Mode:** Letter Grading

#### AAS 423 - Dairy Selection

**Credits:** 2

Selection techniques used in cattle for purchase, breeding, and genetic improvement through the use of visual evaluation, pedigrees, production, and progeny information. 1 lec/1 lab. Special Fee.

**Equivalent(s):** AAS 223

**Grade Mode:** Letter Grading

#### AAS 425 - Introduction to Dairy Herd Management

**Credits:** 4

The course explores economic, scientific and practical aspects of dairy herd management. The topics covered include history, cattle selection, nutrition, housing, milking, and disease prevention strategies. There are a number of field trips and weekly labs emphasizing management and hands-on experience.

**Equivalent(s):** AAS 244, ANSC 409, ANSC 410

**Grade Mode:** Letter Grading

#### AAS 428 - Anatomy and Physiology of Domestic Animals

**Credits:** 4

An overview course describing the anatomy (structure) and physiology (function) of domestic animals, focusing on canine, feline, equine, and bovine species. Anatomic and physiologic topics are intertwined as the course progresses through each body system. Relevant species differences are stressed. Focus is on applied concepts appropriate for animal-related careers. Special Fee.

**Equivalent(s):** AAS 228

**Grade Mode:** Letter Grading

#### AAS 428B - Anatomy and Physiology of Domestic Animals Lab for VTEC majors

**Credits:** 1

Reinforces material presented in AAS 428 lecture and introduces students to the animal body by hands-on study of anatomy. Anatomical relationships and concepts that are important for the medical care of animals are presented. The feline species will be the primary anatomical model used. Comparative anatomy of bovine, equine, and avian species will also be covered. Course is required of Veterinary Technology majors and is designed to be taken along with AAS 428 lecture.

**Co-requisite:** AAS 428

**Grade Mode:** Letter Grading

#### AAS 432 - Introduction to Forage and Grassland Management

**Credits:** 3

Introduction to grasslands of the world and their management. Special emphasis on the identification, production, and utilization of New England forage crops for feeding domestic farm animals. The course includes the selection of local plant species and varieties, including their management and recommended harvesting practices. The course also includes a basic introduction to soils, as well as nutrient and fertility management.

**Equivalent(s):** AAS 232

**Grade Mode:** Letter Grading

#### AAS 434 - Equipment and Facilities Management

**Credits:** 3

Operation of agricultural equipment and maintenance of agricultural facilities as found in New England. Development of the essential skills and technical information needed to manage and supervise agricultural facilities and equipment. 2 lec/1 lab.

**Equivalent(s):** AAS 234

**Grade Mode:** Letter Grading

#### AAS 439 - Fundamentals of Animal Health

**Credits:** 2

Covers the principles of maintaining animal health by preventing and managing disease via husbandry, immunization, diagnostic testing and treatment. Focus is on domestic species; primarily dogs, cats, horses and cows. Topics include external and internal parasitology, microbiology, immunology including vaccination, and disease treatment. Course is designed to be taken along with the appropriate lab section: AAS 439A for Applied Animal Science majors or AAS 439B for VTEC majors, respectively. No credit earned if credit was received for VTEC 439.

**Equivalent(s):** AAS 239, VTEC 439

**Grade Mode:** Letter Grading

**AAS 591 - Studies**

**Credits:** 1-3

Students who have the ability and adequate preparation to work independently may propose a contract to design a course or research project on a topic not available through existing course offerings. The purpose of this research is to explore new areas in the student's field of study or to pursue course material in greater depth. Work is supervised by an appropriate faculty/staff member and credit varies depending on the proposed project/research. Areas may include dairy, light horses, livestock, poultry, meats, forages, management, small animals, or general animal science. Permission required.

**Repeat Rule:** May be repeated for a maximum of 6 credits.

**Equivalent(s):** AAS 291

**Grade Mode:** Letter Grading

**AAS 597 - Applied Animal Science Work Experience**

**Credits:** 0

Employment (12 weeks, generally in the summer following the first year) in an approved animal-related position. Cr/F.

**Equivalent(s):** AAS 297

**Grade Mode:** Credit/Fail Grading

## Faculty

<https://colsa.unh.edu/thompson-school-applied-science/people>