



COURSE SYLLABUS

COURSE 589: ANIMAL SCIENCE

FACULTY INFORMATION:

Instructor: Justin Mills	IGNITE Pathways: North Lab
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COURSE INFORMATION:

Course Description: This course will introduce students to fundamental principles of both companion and production animal science, including, but not limited to, anatomy, physiology, reproduction, nutrition, health, and animal products. Students will gain knowledge and skills through a wide variety of hands-on and practical learning approaches.

Course Learning Outcomes and Course Competencies: Upon successful completion of this course, the student will be able to:

- Provide proper rations utilizing efficient feedstuffs for production and companion animals.
- Utilize principles of reproduction to achieve desired outcomes in various animal systems.
- Classify and evaluate animals for breeding and production.
- Identify and select best practices for animal health care.

Iowa Career and Technical Education Standards: Agriculture

- AS.01 Analyze historic and current trends impacting the animal systems industry.
- AS.03 Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.
- AS.04 Apply principles of animal reproduction to achieve desired outcomes for performance, development, and/or economic production.
- AS.06 Classify, evaluate and select animals based on anatomical and physiological characteristics.

TENTATIVE COURSE OUTLINE:

PBLs
Introductions, Expectations, Orientation
Origins, Taxonomy, Trends
Terminology, Anatomy
Classification, Products
Biosecurity, Diseases
Anatomy
Breeds
Cells, Organs, Systems
Nutrients, Feedstuffs, Rations
Additives, Hormones, Labeling
Judging, Standards
Reproduction, Genetics
Natural v. A.I.
Health, Wellness
Health Tools, Veterinary Care
Modern Animal Issues
Production Animal Outlook