AAS IN LIVESTOCK OPERATIONS & ANIMAL HEALTH

FOUR-SEMESTER CURRICULAR ROADMAP & HERD HEALTH FRAMEWORK

Program Description & Objectives

The Associate of Applied Science in Livestock Operations and Animal Health delivers comprehensive hands-on training across commercial dairy herd telemetry, beef cattle backgrounding, artificial insemination, and large animal clinical care.

Curriculum Structure (64 Credits)

Term	Course Code & Name	Units	Clinical & Management Focus
Fall 1	ANI-101 Principles of Animal Science	3 cr	Comparative anatomy and physiological homeostasis
Fall 1	ANI-104 Ruminant Nutrition & Feed Formulation	4 cr	TMR ration balancing in Excel for lactating cows
Fall 1	AGR-101 Principles of Sustainable Agronomy	3 cr	Alfalfa and silage crop agronomy
Fall 1	MCH-101 Ag Machinery Operation & Safety	3 cr	Skid steers and automated feed mixers
Fall 1	ENG-101 Technical Composition & Ag Reporting	3 cr	Veterinary health logs and treatment logs
Spring 1	ANI-106 Cattle Reproduction & Artificial Insemination	4 cr	Rectal palpation, semen handling, estrus sync
Spring 1	ANI-108 Dairy Parlor Operations & Mastitis Control	3 cr	Electronic milking telemetry and somatic cell counts
Spring 1	AGB-101 Agricultural Economics & San Joaquin Crops	3 cr	Dairy feed-to-milk revenue margin modeling
Spring 1	BIO-101 General Agricultural Biology	3 cr	Microbiology of animal pathogens and biosecurity
Fall 2	ANI-201 Large Animal Clinical Nursing & Pharmacology	4 cr	Antibiotic stewardship, vaccine protocols, IV therapy
Fall 2	ANI-204 Herd Telemetry & Biometric Sensors	3 cr	Rumination collar accelerometer data interpretation
Fall 2	AGB-205 Farm Labor Supervision & Cal/OSHA Law	3 cr	Dairy parlor ergonomics and worker safety
Spring 2	ANI-290 Livestock Capstone Practicum & Herd Audit	4 cr	Independent herd welfare and reproductive audit