

Livestock Management

Course Description: Livestock Management provides knowledge and skills needed for successful work (entry level to management) in the livestock industry. The course will complement a student's supervised agricultural experience program by providing management tools.

Recommended Prerequisites: Agriscience (HQ) or Principles of Agricultural Sciences

Recommended Credit: 1

Recommended Grade Level: 10th, 11th or 12th

Course Codes: (2009-2010) A10 – 5127 or A12 – 5177
(2010-2015) A12 – 5177

Livestock Management

Standard 1.0

Explain the history and classification of livestock.

Standard 2.0

Demonstrate personal and occupational safety with livestock.

Standard 3.0

Differentiate between the internal and external parts of swine, cattle, poultry and sheep.

Standard 4.0

Compare different facilities used in livestock operations.

Standard 5.0

Evaluate ways nutritional classes affect the health of livestock.

Standard 6.0

Evaluate the breeding program in order to develop desirable genetic traits.

Standard 7.0

Evaluate the factors in selecting and judging livestock species.

Standard 8.0

Evaluate methods of disease and parasite control, prevention and treatment.

Standard 9.0

Analyze current marketing strategies of livestock commodities.

Standard 10.0

Integrate academic competencies with principles used in managing livestock.

Standard 11.0

Develop premier leadership and personal growth needed in the livestock industry.

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Standard 1.0

Explain the history and classification of livestock.

Learning Expectations and Performance Indicators:

- 1.1 Summarize terminology associated with livestock management.
- 1.2 Explain the history of livestock species.
- 1.3 Classify livestock according to type, breed, and commodities produced.
- 1.4 Describe the importance of the livestock industry in Tennessee and the United States.
- 1.5 Explore career opportunities in the livestock industry.

Standard 2.0

Demonstrate personal and occupational safety with livestock.

Learning Expectations and Performance Indicators:

- 2.1 Summarize safety procedures for handling and transporting livestock.
- 2.2 Demonstrate the proper selection, use and maintenance of personal protective and handling equipment.
- 2.3 Analyze the health requirements and certificates needed for interstate travel.
- 2.4 Complete a safety test with 100 percent accuracy.

Standard 3.0

Differentiate between the internal and external parts of swine, cattle, poultry and sheep.

Learning Expectations and Performance Indicators:

- 3.1 Examine and explain monogastric and polygastric digestive systems of livestock.
- 3.2 Examine and explain muscle groups of livestock.
- 3.3 Examine and explain skeletal groups of livestock.
- 3.4 Examine and explain endocrine groups of livestock.
- 3.5 Examine and explain nervous systems of livestock.

Standard 4.0

Compare different facilities used in livestock operations.

Learning Expectations and Performance Indicators:

- 4.1 Evaluate facility designs to determine efficiency in livestock management.
- 4.2 Select technological applications necessary for proper livestock management.
- 4.3 Research funding availability from state and federal sources to enhance livestock facilities and equipment.
- 4.4 Evaluate environmental and other regulations that affect raising livestock.

Standard 5.0

Evaluate ways nutritional classes affect the health of livestock.

Learning Expectations and Performance Indicators:

- 5.1 Formulate rations that aid in complete animal health.
- 5.2 Determine nutrient needs of livestock based upon life stage and productivity.
- 5.3 Recommend common and alternative feed stuffs for various livestock species.
- 5.4 Use the Pearson Square method to formulate rations that aid in complete animal health.
- 5.5 Discuss the role of quality pasture and forage management in the nutrition of livestock species.

Standard 6.0

Evaluate the breeding program in order to develop desirable genetic traits.

Learning Expectations and Performance Indicators:

- 6.1 Identify highly inheritable traits important to livestock production.
- 6.2 Research the use of expected progeny difference (EPD) in a livestock breeding program.
- 6.3 Generalize the genetic processes of different animals.
- 6.4 Critique new trends in genetic engineering.
- 6.5 Evaluate the functions of the parts of male and female reproductive systems.
- 6.6 Describe the care and management of breeding animals.
- 6.7 Evaluate different methods used for breeding livestock.

Standard 7.0

Evaluate the factors in selecting and judging livestock species.

Learning Expectations

- 7.1 Diagram the parts of different livestock.
- 7.2 Discuss the different USDA market grades for each species of livestock.
- 7.3 Identify the parts and whole sale cuts of each species of livestock.
- 7.4 Describe factors to consider in judging and selecting breed and market animals.
- 7.5 Evaluate various classes of livestock and justify placing by means of oral reasons.

Standard 8.0

Evaluate methods of disease and parasite control, prevention and treatment.

Learning Expectations

- 8.1 Distinguish between signs of proper health and poor health.
- 8.2 Identify common diseases and parasites, their symptoms, and proposed treatment of each.
- 8.3 Analyze current practices in an animal health program.
- 8.4 Demonstrate the administration of medications, vaccinations, and proper first aid for livestock.

Standard 9.0

Analyze current marketing strategies of livestock commodities.

Learning Expectations

- 9.1 Identify factors that determine profit or loss from livestock products
- 9.2 Discuss programs that allow for value added marketing potential.
- 9.3 Research new technologies in livestock marketing and sales.

Standard 10.0

Integrate academic competencies with principles used in managing livestock.

Learning Expectations

- 10.1 Construct and use spreadsheets and databases to keep records on livestock maintenance.
- 10.2 Use appropriate grammar in completing livestock forms and applications.
- 10.3 Debate current livestock topics.
- 10.4 Use standard and metric units of measurement to determine needed feed stuffs.
- 10.5 Use ratios to determine the amount of feed needed to meet the nutritional requirements of animals.
- 10.6 Read, interpret and construct graphs to compare weight gain to feed intake.
- 10.7 Evaluate the importance of an animal's nutrition to growth and health.
- 10.8 Perform diagnosis of livestock diseases and pest infestation.
- 10.9 Use nomenclature classification to group livestock, diseases and pests.

Standard 11.0

Demonstrate premier leadership and personal growth needed in the livestock industry.

Learning Expectations

- 11.1 Demonstrate skills associated with individuals in leadership positions in a livestock related industry.
- 11.2 Demonstrate public speaking skills to inform audiences about livestock concerns.
- 11.3 Conduct a meeting using appropriate parliamentary procedure abilities.
- 11.4 Develop and implement a program of activities for the local FFA chapter.
- 11.5 Demonstrate the use of modern communication equipment to inform the public about livestock concerns.