

# National Collegiate Livestock Coaches' Association

Principles of Livestock
Selection & Evaluation
Certification
Study Guide

## **CERTIFICATION OVERVIEW**

The National Collegiate Livestock Coaches' Association (NCLCA) Principles of Livestock Selection & Evaluation Certification verifies individuals have acquired the specialized skills necessary to excel in the livestock industry. The certification exam assesses understanding of selection criteria and major factors considered in livestock evaluation.

## **EXAM OVERVIEW**

The NCLCA Principles of Livestock Selection & Evaluation Certification is hosted on the iCEV testing platform. The certification exam is a 100-question, randomized assessment. Exam questions are in the format of multiple choice, sort order, diagramming, matching, labeling and other question types meant to fully evaluate an individual's competency of the industry standards. The certification exam should be proctored within a controlled environment. The proctor of the exam must review and verify all exam procedures and provide electronic documentation through the exam platform.

More information about the certification exam and testing platform, including optional preparation materials offered by iCEV, can be found at <a href="https://www.icevonline.com/livestock">https://www.icevonline.com/livestock</a>

## ABOUT THE NATIONAL COLLEGIATE LIVESTOCK COACHES' ASSOCIATION

The National Collegiate Livestock Coaches' Association provides unique opportunities to develop student knowledge of the livestock industry through educational settings beyond traditional classrooms. The association is comprised of coaches from various universities throughout the United States.

## **INDUSTRY STANDARDS**

The certification exam assesses knowledge and skills from the following weighted industry standards set by NCLCA:



#### **BREED IDENTIFICATION- 10%**

Cattle Goat Sheep Swine



#### **EXTERNAL ANATOMY- 15%**

Terms & Terminology External Components of Livestock External Anatomy Identification



## EXPECTED PROGENY DIFFERENCES (EPDS) & BREEDING SYSTEMS- 15%

Parent Selection
Types of Breeding Systems
Crossbreeding Methods
Mating Systems



### **SELECTION & EVALUATION CRITERIA- 15%**

Cattle

Goat

Sheep

Swine

## **Industry Standard Overview**

To pass the NCLCA Principles of Livestock Selection & Evaluation Certification exam, certification candidates must have adequate knowledge of the industry standards. The following outlines an indepth overview of the industry standards and sub-standards:

## **Industry Standard: Breed Identification**



- The Evolution of Livestock
- Origins of Livestock
- Marketing Livestock
- Cattle Breeds
- Goat Breeds
- Sheep Breeds
- Swine Breeds



### **Industry Standard: External Anatomy**

- Anatomical Terms of Location
- External Components
  - Cattle
  - Swine
  - Sheep
  - Goat

## Industry Standard: Expected Progeny Differences (EPDs) & **Breeding Systems**



- Designing a Breeding Program
- Breeding Systems
- · Crossbreeding Methods
- Systems of Mating

## **Industry Standard: Selection & Evaluation Criteria**



- Basics of Livestock Judging
- Market Steer Evaluation
- Breeding Cattle Evaluation
- Market Hog Evaluation
- Breeding Gilt Evaluation
- Market Lamb Evaluation
- Breeding Sheep Evaluation
- Market Goat
- Slaughter Cattle Grading



## **Optional Preparation Materials Overview**

The preparation materials offered by iCEV for the NCLCA Principles of Livestock Selection & Evaluation Certification was specifically created to prepare candidates for the certification exam. While it is not required to complete the preparatory materials before accessing the certification exam, NCLCA recommends certification candidates complete some form of training. The following outlines the lessons scope and objectives:

#### **Lesson 1: The Livestock Industry**

- 1. To analyze the growth and development of the livestock industry as a global commodity.
- 2. To examine the stages of animal growth and relate it to market readiness.
- 3. To evaluate marketing practices for livestock, meat and meat products.
- 4. To explore career development and entrepreneurship opportunities.

#### Lesson 2: Livestock Breed Identification: Cattle

- 1. To identify the breeds of cattle.
- 2. To understand the breeds origins and characteristics.
- 3. To analyze the breeds importance in livestock production.

#### **Lesson 3: Livestock Breed Identification: Goats**

- 1. To identify the breeds of goats.
- 2. To understand the breeds origins and characteristics.
- 3. To analyze the breeds importance in livestock production.

#### **Lesson 4: Livestock Breed Identification: Sheep**

- 1. To identify the breeds of sheep.
- 2. To understand the breeds origins and characteristics.
- 3. To analyze the breeds importance in livestock production.

#### **Lesson 5: Livestock Breed Identification: Swine**

- 1. To identify the breeds of swine.
- 2. To understand the breeds origins and characteristics.
- 3. To analyze the breeds importance in livestock production.

#### Lesson 6: External Anatomy of Livestock: Terms & Terminology

- 1. To identify the external anatomy of livestock species.
- 2. To analyze the functions of the external anatomy of livestock species.
- 3. To compare the external anatomy of livestock species.

#### **Lesson 7: Livestock Breeding Systems**

- 1. To learn how to set goals for a successful breeding program.
- 2. To learn about choosing and weighing traits in a breeding program.
- 3. To learn how to determine measurements in a breeding program.
- 4. To learn how to devise a strategy for selecting parents in a breeding program.

#### **Lesson 8: Livestock Judging Fundamentals**

- 1. To understand the selection criteria for the four different livestock species.
- 2. To know how livestock judging is used in real world situations.
- 3. To be able to place a class of livestock based on selection criteria.

#### **Lesson 9: Livestock Judging: Breeding Heifer Evaluation**

- 1. To identify and list the major factors considered in breeding heifer evaluation.
- 2. To analyze and interpret a set of performance records.

#### **Lesson 10: Livestock Judging: Market Steer Evaluation**

- 1. To identify and list the major factors considered in market steer evaluation.
- 2. To establish the ideal modern market steer, identifying three goals important for consumer preference.
- 3. To evaluate and defend the placing of a market steer class.

#### **Lesson 11: Livestock Judging: Breeding Gilt Evaluation**

- 1. To define the major factors necessary to select replacement gilts in a commercial operation.
- 2. To be able to analyze and interpret a set of performance records with specific reference to positive and negative numbers.
- 3. To evaluate and defend the placing of a breeding gilt class.

#### **Lesson 12: Livestock Judging: Market Hog Evaluation**

- 1. To identify and list the major factors considered in market hog evaluation.
- 2. To compare the modern type with the old-fashioned type market hog, recognizing at least three advantages of the modern hog for today's consumer.
- 3. To evaluate and defend the placing of a market hog class.

#### **Lesson 13: Livestock Judging: Breeding Sheep Evaluation**

- 1. To identify and list the major factors considered in breeding sheep evaluation.
- 2. To introduce performance records with specific reference to positive and negative numbers.

#### **Lesson 14: Livestock Judging: Market Lamb Evaluation**

- 1. To identify and list the major factors considered in market lamb evaluation.
- 2. To establish the ideal modern market lamb.

#### **Lesson 15: Livestock Grading: Slaughter Cattle**

- 1. To evaluate slaughter cattle and beef carcasses.
- 2. To learn to estimate quality grade for slaughter cattle at the 70 percent level of accuracy.
- 3. To complete a practice class using his/her new skills.

**Lesson 16: Breeding Gilts-1 (With Officials)** 

**Lesson 17: Market Hogs-31 (With Officials)** 

**Lesson 19: Breeding Ewes-1 (With Officials)** 

**Lesson 20: Market Lambs-1 (With Officials)** 

**Lesson 21: Breeding Heifers-2 (Performance) (With Officials)** 

**Lesson 22: Bulls- 2 (Performance) (With Officials)** 

**Lesson 23: Market Steers-1 (With Officials)** 

**Lesson 24: Market Goats- 1 (With Officials)**