Fundamentals of Animal Science Certification

The Elanco Fundamentals of Animal Science Certification verifies individuals have acquired the foundational knowledge and skills to pursue a career within the animal science industry.

Certification Exam

The certification exam, tested for on the iCEV platform, consists of 100 questions and assesses knowledge and skills from the following weighted industry standards:

- **General Animal Science**: 25%
  - Origin & Evolution of Livestock
  - Terms & Terminology (beef, dairy, horse, sheep, goat, swine, poultry)
  - External Anatomy
  - Meat Inspection Regulations
  - Harvesting Process

- **Animal Breeding**: 15%
  - Animal Microgenetics (cell division, embryo development, structure/composition of genes)
  - Breeding Systems (grading up, crossbreeding, inbreeding, linebreeding)
  - Breeding Methods (pen, stud, artificial insemination, embryo transfer, cloning)

- **Animal Health & Wellness**: 20%
  - Common Diseases (nutritional, bacterial, viral, parasitic, fungal, genetic)
  - Common Parasites (internal, external)
  - Basic Surgical Procedures (dehorning, castration, tail docking, teeth clipping, lancing)
  - Injection Methods (intramuscular, subcutaneous, intravenous)
  - Injection & Vaccination Rules and Regulations

- **Animal Nutrition**: 15%
  - Digestive Systems (ruminant, monogastric)
  - Digestive Requirements & Nutritional Needs (ruminant, monogastric)
  - Balanced Rations
  - Feeds & Additives
  - Hays & Legumes

- **Animal Management Practices**: 25%
  - Production Systems
  - Handling & Equipment
  - Nutrition & Health
  - Selection & Breeding
  - Management Practices

Meeting the Industry Need

- Assesses Competencies Based on Weighted Industry-Valued & Industry-Accepted Standards
- Validates Knowledge & Skills
- Allows Employers to Identify & Connect with Skilled Candidates
- Jump-Starts Individuals’ Careers

www.icevonline.com/animalscience

Industry Standards Breakdown

**General Animal Science**
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**Animal Management Practices**
- Production Systems
- Handling & Equipment
- Nutrition & Health
- Selection & Breeding
- Management Practices
Example Assessment Questions

1. If a lamb consumes three pounds of feed per day, about how many pounds of water should he consume?
   - A 6 to 15 lbs.
   - B 2 to 5 lbs.
   - C 10 to 14 lbs.
   - D 15 to 18 lbs.

2. Diarrhea, straining, loss of appetite and fever are symptoms common with which of the following diseases?
   - A Haemonchus contortus
   - B Coccidiosis
   - C Milk fever
   - D White muscle disease

3. Weighing all EPDs, overall, which of the following bulls is superior to the rest?

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<th>DOB</th>
<th>BW</th>
<th>WW</th>
<th>YW</th>
<th>Milk</th>
<th>REA</th>
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4. The image illustrates which of the following litter and pig numbers?
   - A 2 - 12
   - B 12 - 2
   - C 2 - 10
   - D 10 - 2

5. Basic nutrients include:
   - Water
   - Protein
   - Carbohydrates
   - Vitamins
   - Minerals

Testing Platform

Elanco utilizes iCEV, a division of CEV Multimedia, as the testing platform for this certification.

iCEV fulfills the following responsibilities:

1. Provides secure testing technology for certification exams
2. Regulates testing environments
3. Works with secondary and post-secondary academic institutions, workforce development associations and the public at large to offer certification options for career advancement
4. Provides certification verification to employers for potential job applicants
5. Offers optional certification exam preparation materials

“Supporting an emerging workforce that is interested in raising awareness about global food security and celebrating the human-animal bond is why Elanco decided to get involved.”

Larbi Van Lier
Senior Director, Head of Asia Pacific (APAC)
Elanco

www.icevonline.com/animalscience

About Elanco

Elanco is a global animal health company that develops products and knowledge services to prevent and treat disease in food, animals and pets in more than 90 countries. With a 64-year heritage, Elanco rigorously innovates to improve the health of animals and benefit customers, while fostering an inclusive, cause-driven culture for more than 5,800 employees. Elanco is driven by their vision of food and companionship enriching life - all to advance the health of animals, people and the planet.