

# Advanced Animal Science - 5th 6 Weeks Lesson Plan

## Aligned with TEKS Standards:

- **130.7(c)(2):** Analyze animal diseases, their causes, and treatments.
  - **130.7(c)(3):** Explain animal health management practices.
  - **130.7(c)(6):** Evaluate nutritional requirements for different species.
  - **130.7(c)(9):** Examine common parasites and their impact on livestock.
  - **130.7(c)(10):** Investigate the role of genetics in animal health and production.
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## Week 1: Nutritional & Bacterial Diseases

### Monday: No School (Student Holiday)

- No lesson.

### Tuesday - Thursday: Nutritional Diseases (iCEV Module)

- **Objective:** Understand common nutritional diseases in livestock.
- **Activity:**
  - Students complete the *Nutritional Diseases* module in iCEV.
  - Group research: Each group selects a nutritional disease (e.g., milk fever, ketosis, rickets) and creates a short presentation.
  - Class discussion on disease prevention through diet.
- **Assessment:** iCEV *Nutritional Diseases Quiz* (Thursday).

### Friday: Bacterial Diseases

- **Objective:** Identify bacterial diseases affecting livestock and their treatment.
  - **Activity:**
    - Watch case study videos on bacterial infections in cattle, poultry, and swine.
    - Students complete a bacterial disease case analysis worksheet.
  - **Assessment:** iCEV *Bacterial Diseases Quiz*.
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## Week 2: Bacterial, Viral, and Fungal Diseases

### Monday: Bacterial Diseases

- **Activity:**
  - iCEV module on *Bacterial Diseases*.
  - Pair discussion: Students summarize one bacterial disease and how to prevent it.

## Tuesday - Thursday: Viral & Fungal Diseases

- **Objective:** Differentiate between viral and fungal infections in animals.
  - **Activity:**
    - Students complete iCEV *Viral Diseases* and *Fungal Diseases* modules.
    - Disease comparison chart: Students compare symptoms, transmission, and treatments of bacterial, viral, and fungal diseases.
  - **Assessment:** iCEV quizzes for each disease type.
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## Week 3: Parasitic Diseases

### Monday - Wednesday: Parasitic Diseases (External & Internal)

- **Objective:** Recognize internal and external parasites in livestock and their impact.
  - **Activity:**
    - iCEV *Parasitic Diseases* module.
    - Hands-on activity: Identify parasites using images and models.
    - Create a "Parasite Wanted Poster" detailing characteristics of a chosen parasite.
  - **Assessment:** iCEV *Parasitic Diseases Quiz* (Tuesday).
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## Week 4: Genetic & Neurological Diseases

### Monday - Wednesday: Genetic Diseases

- **Objective:** Understand genetic disorders and their influence on animal production.
- **Activity:**
  - iCEV *Genetic Diseases* module.
  - Research genetic diseases such as HYPP in horses, Porcine Stress Syndrome, etc.
  - Students create a digital infographic on a genetic disease.
- **Assessment:** iCEV *Genetic Diseases Quiz* (Wednesday).

### Thursday - Friday: Neurological Diseases

- **Objective:** Learn about neurological diseases in animals and prevention strategies.
- **Activity:**
  - Students complete iCEV *Neurological Diseases* module.
  - Case study analysis of neurological disorders in livestock.

- **Assessment:** *iCEV Neurological Diseases Quiz.*
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## **Week 5: Parasites & Internal Health**

### **Monday - Tuesday: Common Parasites**

- **Activity:**
  - *iCEV Common Parasites* module.
  - Parasite control lab: Students identify and propose treatment plans for different parasite cases.

### **Wednesday - Friday: Internal Parasites & Digestion**

- **Activity:**
    - Students complete *iCEV Internal Parasites* module.
    - Hands-on digestion demonstration (simulating stomach functions with different feeds).
  - **Assessment:** *iCEV Internal Parasites Quiz.*
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## **Week 6: Basic Nutrition**

### **Monday - Thursday: Livestock Nutrition**

- **Objective:** Analyze the role of nutrition in maintaining animal health.
- **Activity:**
  - *iCEV Basic Nutrition* module.
  - Feed ration project: Students design an optimized diet for different species.
- **Assessment:** *iCEV Basic Nutrition Quiz* (Friday).