

# Industry Credentials, Concentration Sequences, and Career Clusters

## Introduction to Animal Systems (8008)

### Industry Credentials:

*These apply only to 36-week courses*

- Agricultural Biotechnology Assessment
- Animal Systems Assessment
- Beef Quality Assurance Examination
- College and Work Readiness Assessment (CWRA+)
- Customer Service Specialist (CSS) Examination
- Food Safety & Science Certification Examination
- Fundamentals of Animal Science Certification Examination
- Meat Evaluation Certification Examination
- National Career Readiness Certificate Assessment
- Principles of Livestock Selection and Evaluation Certification Examination
- Workplace Readiness Skills for the Commonwealth Examination

### Concentration Sequences:

*A combination of this course and those below, equivalent to two 36-week courses, is a **concentration sequence**. A **program completer** is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses based on their career pathways.*

- Agricultural Business Fundamentals I
- Agricultural Production Technology
- Agricultural Structural Systems
- Applied Agricultural Concepts (18 weeks)
- Applied Agricultural Concepts (36 weeks)
- Biological Applications in Agriculture
- Biotechnology Foundations in Agricultural and Environmental Science
- Equine Science (18 Weeks)
- Equine Science (36 Weeks)
- Fisheries and Wildlife Management

- Foundations of Agriculture, Food, and Natural Resources
- Livestock Production Management
- Operating the Farm Business
- Small Animal Care I
- Small Animal Care I (18 weeks)

## **Career Clusters, Career Pathways, and Occupations:**

- Agriculture, Food and Natural Resources
  - Agribusiness Systems
    - Agricultural Commodity Broker
    - Agricultural Economist
    - Agricultural Loan Officer
    - Agricultural Products Sales Representative
    - Farm, Ranch Manager
    - Feed, Farm Supply Store Sales Manager
  - Animal Systems
    - Agricultural Products Sales Representative
    - Animal Breeder, Husbandry
    - Animal Geneticist
    - Animal Nutritionist
    - Animal Scientist
    - Aquacultural Manager
    - Poultry Manager
    - Veterinarian
    - Veterinary Technician
  - Environmental Service Systems
    - Environmental Compliance Inspector
    - Environmental Sampling and Analysis Technician
    - Hazardous Materials Handler
    - Toxicologist
    - Water Conservationist
  - Food Products and Processing Systems
    - Biochemist
    - Food Scientist
  - Natural Resources Systems
    - Fish and Game Officer
    - Fisheries Technician

- Forest Manager, Forester
- Forest Technician
- Microbiologist
- Park Manager
- Park Technician
- Wildlife Manager
- Power, Structural, and Technical Systems
  - Agricultural Engineer
  - Agricultural Equipment Parts Manager
  - Agricultural Equipment Parts Sales Representative
  - Machinist
  - Welder