Poultry Science

Poultry Science is a one-credit course that allows students to develop an appreciation of the importance of the poultry industry. Topics include career opportunities, safety, environmental issues, breeds of poultry, nutrition and disease prevention, consumer issues, biotechnological advancement, and management and marketing practices.

Content standards for this course are not intended to serve as the entire curriculum. Teachers are encouraged to expand the curriculum beyond the limits of these content standards to accommodate specific community interests and utilize local resources. This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.

Career and technical student organizations are integral, cocurricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Career Opportunities

Students will:

1. Describe various careers associated with poultry science.

2. Explain the history of poultry science.

Safety

3. Demonstrate the safe handling of chemicals and drugs used in poultry production.
   Example: preventing chemicals from leaking into the groundwater supply
   - Identifying safety procedures for transporting poultry
     Examples: securing birds in crates, securing crates on trucks

Environmental Issues

4. Identify procedures for disposal of poultry litter, including spreading wet, dry, and dehydrated litter.

5. Identify procedures for disposal of dead birds, including composting and freezing.
Breeds of Poultry

6. Identify various breeds of poultry, including chickens, ducks, geese, quail, and turkeys.
   - Describing the structure and function of poultry skeletal, digestive, reproductive, excretory, respiratory, circulatory, and nervous systems

Nutrition and Disease Prevention

7. Explain accepted feeding practices for various kinds of poultry.

8. Describe procedures for controlling diseases and parasites in poultry production.
   - Identifying symptoms for common poultry diseases and parasites

9. Describe factors to be considered in the design of energy-saving housing for poultry, including ventilation and lighting.
   - Explaining uses of automation in poultry production
     Examples: feeding, watering, air-conditioning, egg collecting, removing waste
   - Analyzing cooling systems used for reducing heat stress in poultry houses
     Examples: fan systems, fogging systems, evaporative cooling systems

10. Analyze health issues associated with poultry processing to avoid the spread of bacterial and viral infections.

Consumer Issues

11. Identify governmental agencies regulating the poultry industry.
    Examples: Alabama Department of Agriculture and Industries, United States Department of Agriculture (USDA), Occupational Safety and Health Administration (OSHA)
    - Describing the importance of consumer education and community relations in poultry production
      Examples: odor issues, irradiation of meat, water quality

Biotechnological Advancement

12. Describe biotechnological advancements in poultry science.
    Examples: using eggs to produce medicines, vaccinating eggs

Management and Marketing Practices

13. Explain the operation of modern poultry businesses.
    - Comparing methods of marketing poultry products
    - Identifying advantages and disadvantages of contracting with large poultry firms