NEW YORK STATE EDUCATION DEPARTMENT
MIDDLE LEVEL CAREER AND TECHNIC0247 (M)8 (AR)17E Tw ( )Tj 70 Tw 33C

MODULE DESCRIPTION

This module introduces students to historical and scientific developments related to the management and welfare of domesticated animals. Students investigate various animal agriculture industries and the products, services, and issues associated with each. Students explore the wide variety of career options related to animal agriculture and identify the knowledge, skills, education, and training necessary for success within these fields.

GUIDING QUESTION

What knowledge and skills are necessary to demonstrate introductory understanding of the development, management, and care of animals in the agriculture industry?

MODULE CONTENT

1. ANIMAL ORIGINS

STUDENTS WILL:
   a) List and describe characteristics of wild animals such as appearance to aid survival, behavior around humans, predator and forager feeding, and reproduction
   b) Define "animal domestication" and describe characteristics of domesticated animals
   c) Explain how groups of animals descending from a common ancestry and possessing certain common characteristics are classified

2. CONDITIONS AND PRACTICES FOR ANIMAL CARE

STUDENTS WILL:
   a) Describe indicators of animal well-being such as animal behavior, physiology, longevity, and reproductionhu0 Td ( )Tj EMC /LBody <</MCID 234 (y)8 ( )10 (a)4 (nd)10 (p)suaTSar.1 (u

g) Summarize the challenges involved in working with animals and list resources available to overcome them, including equipment, tools, and technology

3. PRODUCTION

STUDENTS WILL:
a) Identify and summarize the effects of animal agriculture on the environment such as waste disposal, carbon footprint, air quality, and environmental efficiencies
b) Identify and categorize terms and methods related to animal production such as sustainable conventional, humanely raised, natural, and organic
c) Explain how farmers work with the lifecycle of animals (breeding) to produce animals for market

4. ANIMAL PRODUCTS AND FOOD SYSTEMS

STUDENTS WILL:
a) Understand and explain that animals are raised for meat and byproducts until the animals reach the age/size to produce desired products for human consumption
b) List products obtained from animals for everyday life
c) Trace the distribution system for animal products
d) Research and evaluate programs to assure the safety of animal products for consumption

5. CAREERS IN ANIMAL SCIENCE

STUDENTS WILL:
a) Investigate a career in animal agriculture and identify the pathways used to reach that career
b) Assess personal knowledge, skills, and interest in careers in agriculture and evaluate personal suitability for these careers

ILLUSTRATIVE ACTIVITIES BY THEME MODULE

These activities are intended to serve as examples of how the content in this lesson could be tied to each of the six middle level themes.

CAREER AND COMMUNITY OPPORTUNITIES

PREPARE A LOCAL AGRICULTURAL PRODUCT

Invite a local producer of an animal product to class to discuss the process of bringing local agriculturalproducts to market. Ask the producer to mentor the class as students prepare or process a local agricultural product, such as yogurt, cheese, butter, or jerky. Students test market their product at an afterschool or evening event.

PROBLEM SOLVING AND INNOVATION

ANIMAL NUTRITIONIST

Students discover the roles and responsibilities of animal nutritionists in protecting the health of animals in captivity. Students take on the role of animal nutritionist and evaluate the ingredients in pet food against the nutritional needs of the animals the food is meant to feed. Students suggest ways the pet food could be altered to better meet the animal's nutritive and digestive needs. Students dde whether they would use the pet food for an animal in their care and justify their decision.

SUSTAINABILITY

FISH FARMING

Students discover the sources of various fish and seafood and compare wild--

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NEW YORK AGRICULTURE IN THE CLASSROOM (NYAITC)

https://newyork.agclassroom.org/

This website is a partnership of Cornell University, the NYS Department of Agriculture and Markets, the NYS Education Department, Cornell Cooperative Extension, and the New York Farm Bureau. Resources include the Agricultural Literacy Curriculum Matrix, lesson plans, and websites for classroom use.

NATIONAL FFA AG EXPLORER

https://www.discoveryeducation.com/

National FFA and Discovery Education have created a comprehensive career resource to help students explore the broad range of careers within the industry of agriculture. Students learn about agriculture careers by watching the videos, exploring the career pages and completing the Career Finder interactive.

NEW YORK STATE FFA

nysffa.org

The New York State FFA webpage houses information on events. Information about Junior Competition Events, FFA Manual, FFA Student handbook, and 8 (p]47amhga)4 (n)T (m)4 ([(S)4 (t523 (nts

UNITED STATES DEPARTMENT OF LABOR CAREERONESTOP

https://www.careeronestop.org

CareerOneStop is the career, training, and job search website for the U.S. Department of Labor. The website serves job seekers, businesses, students, and career advisors with a variety of free online tools, information and resources.

ASSOCIATION OF CAREER AND TECHNICAL EDUCATION CAREER PLANNING GUIDE

https://www.acteonline.org/wp-content/uploads/2018/02/ACTE_CC_Paper_FINAL.pdf

Research has identified middle school as a time when students can benefit the most from career exploration, a process of building self awareness, learning about potential careers, and developing a plan for reaching future goals.

ADVANCE CTE MIDDLE LEVEL CAREER INTEREST INVENTORY

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