

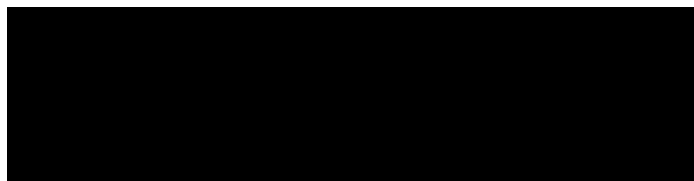
NEW YORK STATE EDUCATION DEPARTMENT  
MIDDLE LEVEL CAREER AND TECHNICAL EDUCATION

AGRICULTURAL EDUCATION

STEWARDSHIP OFFETLAND

CONTENT MODULE

Z & K Z D d d ~~2023~~



## MODULE DESCRIPTION

This module introduces students to the ways natural resources are utilized by humans in daily life. Students will understand the ways that soil, water, air, and energy are used in the agriculture industry and examine issues related to the conservation of these natural resources in agriculture. Students explore the wide variety of career options related to conservation and natural resources 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 agricultural impacts on natural resource systems?

## MODULE CONTENT

### 1. SOIL

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STUDENTS WILL:

a)

- c) Analyze the impacts of human and agricultural use on water quality
- d) Analyze water distribution and conservation methods
- e) Explain agricultural practices designed to conserve water and protect water quality

## 4. ENERGY

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### STUDENTS WILL:

- a) List and describe conventional and alternative energy sources used in agriculture
- b) Compare and contrast the environmental impacts of conventional and alternative energy sources
- c) Assess the environmental, economic, and social consequences of climate change
- d) Explain agricultural practices designed to conserve energy and protect Earth

## 5. CAREERS IN CONSERVATION AND NATURAL RESOURCES

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### STUDENTS WILL:

- a) Investigate a career in conservation and natural resources and identify the pathways used to reach that career
- b) Assess personal knowledge, skills, and interest in careers in conservation and natural resources and evaluate personal ability for these careers

## ILLUSTRATIVE ACTIVITIES BY THEME MODULE

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



test their predictions by burying pieces of trash in a model landfill. After a set number of months, uncover the trash to see which materials biodegrade in the soil.

## STANDARDS ADDRESSED

### NEW YORK STATE CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES (CDOS) STANDARDS

#### STANDARD 1: CAREER DEVELOPMENT

Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions

#### STANDARD 2: INTEGRATED LEARNING

Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings

#### STANDARD 3A: UNIVERSAL FOUNDATION SKILLS

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace

### COMMON CAREER TECHNICAL CORE STANDARDS

#### CAREER READY PRACTICES

1. Act as a responsible and contributing citizen and employee
2. Apply appropriate and academic and technical skills
3. Attend to personal health and financial well-being
5. Consider environmental, social, and economic impacts of decisions
6. Demonstrate creativity and innovation
7. Employ valid and reliable research strategies
8. Utilize critical thinking to make sense of problems and persevere in solving them
9. Model integrity, ethical leadership, and effective management
10. Plan education and career paths aligned to personal goals
11. Use technology to enhance productivity

### NATIONAL AGRICULTURAL EDUCATION STANDARDS

- CS.05. Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food, and Natural Resources career pathways

- NRS.01. Plan and conduct natural resource management activities that apply logical, reasoned, and scientifically based solutions to natural resource issues and goals
- NRS.02. Analyze the interrelationships between natural resources and humans
- NRS.03.

## 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

