Greenhouse Production and Management

Greenhouse Production and Management is a one-credit course related to the production of greenhouse crops. Topics include career opportunities, safety, plant propagation, growing media, plant identification, greenhouse production, pest control, business management, and equipment and facilities. The hands-on approach to learning is a key component in this course.

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, co-curricular 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 careers in the greenhouse production and management industry.

Safety

2. Describe safety precautions related to the greenhouse production and management industry.

Plant Propagation

3. Demonstrate propagation methods for greenhouse plants.

4. Practice seed germination techniques in greenhouse operations.

Growing Media

5. Adjust greenhouse growing media properties by adding amendments.
   • Adjusting the pH of greenhouse growing media

6. Prepare growing media mixtures for greenhouse plants.
Plant Identification

7. Identify greenhouse plants by common name.

Greenhouse Production

   - Controlling environmental conditions for plant growth in the greenhouse
     Examples: temperature control, ventilation, watering

   Examples: winter—poinsettias
             spring—trumpet lilies

10. Identify common greenhouse plant disorders.
    Examples: root rot, insect damage, fungus

11. Select types of fertilizers and methods of application used in greenhouse production.

Greenhouse Pest Control

12. Apply pesticides to greenhouse crops.
    - Identifying safety and first aid precautions in greenhouse management
    - Using correct pesticides for intended target in greenhouse management
    - Disposing of containers and leftover pesticide mixtures according to Environmental Protection Agency (EPA) standards

Business Management

13. Select quality greenhouse plants for marketing.

14. Demonstrate managerial skills for successfully operating a greenhouse business.

Greenhouse Equipment and Facilities

15. Maintain greenhouse facilities.

16. Maintain equipment used in greenhouse operations.