

# CAREER & TECHNICAL EDUCATION



## HORTICULTURE



JACKSON HIGH SCHOOL

330-837-3501



### HORTICULTURE



### **HORTICULTURE**

Horticulture is the art, science and technology used to produce fruits, nuts, vegetables, flowers, trees, shrubs, and turf grass for food and beautification of the environment. The horticulture industry in Ohio is an economically important, highly diversified industry, with a high demand and many job opportunities. The JHS Horticulture Program introduces students to various aspects of the profession by providing knowledge and technical skills including research opportunities. Core focus areas include Plant Science, Greenhouse and Nursery Management, Landscape Systems Management, Landscape Hardscapes, Turf Science and Management, and an Agricultural and Environmental Systems Capstone. Business leadership and communication skills are developed to prepare students to be college and career ready.

For More Information 330-837-3501 Roy Dria, Horticulture Instructor, ext 1540 Donna Jeffers, Assistant Principal, Career & Tech Director, ext. 1407

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### Curriculum

This is a 2 year program  $\,$ 

Junior Year - 3 credits

**Plant and Horticultural Science** - Focuses on the knowledge and skills required to research, develop, produce, and market agricultural, horticultural, and native plants and plant products. Students apply principles and practices of plant physiology and anatomy, plant protection and health, reproductive biology in plants, influences in bioengineering, plant nutrition, and disorders. Environmental aspects of irrigation, chemical application, soils and pest management will be studied and applied.

**Greenhouse and Nursery Management** - Principles of science, engineering, and business are used to support the sustainable propagation and production of plants in a commercial nursery or greenhouse facility. Management of soil/media, water and nutrient distribution, lighting, ventilation and temperature, and pests will be learned and applied. Students will develop successful business, communication, marketing, and sales strategies for use in the greenhouse and nursery industries.

Landscape Systems Management - Students will learn methods for establishing and maintaining landscapes to promote growth and balance. Students will learn to optimize growing conditions, balance nutrients, and manage pests and disease. Horticultural skills including proper planting, fertilizing, and pruning techniques will be practiced. The implications of landscape installation on the environment will be analyzed and eco-friendly practices applied. Students will also employ communication, business and management strategies appropriate for the industry.

### Senior Year - 3 credits

Landscape Hardscapes – Students will learn skills in constructing and installing hardscape features in a landscape. Topics include basic principles of building and implementing designs drawn and drafted from computer-aided designs and blueprints. Students will install artificial lighting, water systems, deck, and creative concrete features on job sites. Throughout the course, business management practices, employability skills, and safety procedures will also be emphasized.

**Turf Science and Management** - The course will apply principles of science, engineering, and business to support the establishment and maintenance of residential, athletic, and recreational turf. Environmental awareness and conservation practices will be applied. Students will employ communication, business, and management strategies appropriate for the industry.

**Agricultural and Environmental Systems Capstone** - Students apply Agricultural and Environmental Systems program knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others.