Science in Horticulture / Botany - 0141

The focus of this course is on the science of plants (botany). Specific topics include photosynthesis and respiration, analysis of the difference of plant and animal cell structure, genetics, taxonomy and classification. Also included are topics covering entomology, soil chemistry, and plant diseases; virus and bacteria life cycles and effects on plant growth. Focus is on horticultural crops including greenhouses, landscape and floral plants.

HORTICULTURE

Understanding Horticulture

Determining the Importance of the Horticulture Industry

Understanding Environmental Impacts of Horticulture

Explaining Career Opportunities in Horticulture

Practicing Horticulture Safety

Classifying Ornamental Plants

Understanding Root Anatomy

Understanding Stem Anatomy

Understanding Leaf Anatomy and Morphology

Understanding Flower Anatomy

Understanding Plant Physiology

Understanding Light, Temp., Air & Water Effects on Plant Growth

Understanding Plant Growth Regulators

Understanding Sexual Reproduction

Propagating Plants Sexually

Propagating Plants by Cuttings

Propagating Plants by Division, Separation and Layering

Propagating Plants by Grafting and Budding

Propagating Plants by Tissue Culture

Understanding Properties of Growing Media

Understanding Growing Media Components

Supplying Nutrients to Floriculture Crops

Growing Poinsettias

Growing Potted Chrysanthemums

Growing Minor Potted Flowering Crops

Forcing Easter Lilies

Growing and Forcing Bulbs, Corms and Tubers

Growing Foliage Plants

Growing Bedding Plants

Growing Potted Perennials

Understanding Nursery Production Facilities

Producing Nursery Crops

Packaging Nursery Crops

Managing the Nursery Business

PLANT AND SOIL SCIENCE

Classifying and Naming Plants

Examining Flowers and Fruits

Identifying Plant Types and Uses

Using Crossbreeding and Hybrids

Understanding Plant Life Cycles

Examining Photosynthesis

Understanding Respiration

Determining Nutrient Functions and Utilization

Determining the Nature of Soil

Understanding Soil Formation

Managing Plant Pests

Determining the Kinds of Pesticides

Using Pesticides Safely