



## 2021 FULL-SEASON HORTICULTURE PRACTICUM

The Horticulture Practicum is an experiential learning course in the fundamental skills and concepts of organic growing in southern New England. The growing season (April-November) is divided into 4 units, and coursework will focus on growing food and flowers together in an on-site garden. Each unit has concept questions. The New Garden Society's goal is to offer students the resources, exposure and practice necessary to answer all of these questions.

### Unit 1: Spring

#### **Site Assessment & Design**

*What elements of a site influence the design?*

*Identify current and future site use.*

*Describe soil sampling procedure.*

*What do we learn from the soil analysis?*

#### **Garden Planning**

*What are the goals for the site? (Production, habitat, beautification)*

*What information can you gather from a seed packet?*

*Describe how frost dates, days to maturation and plant physiology influence your garden design.*

*How do plant families influence crop rotation?*

*What is the role of record keeping in the garden?*

#### **Propagation**

*Explain the environmental requirements for seed germination.*

*Describe the requirements for germination media.*

*How do you select which crops are direct seeded or transplanted?*

*Perform multiple types of asexual propagation: layering, division, cuttings.*

#### **Site Preparation**

*What are some ways that we use math in the garden?*

*How many cubic yards of compost would we need to spread 2" of compost on all our garden beds?*

*What are ways to prepare the garden that support healthy soil structure?*



### **Soil Health**

*What are the physical components (texture) of soil?*

*What are the chemical properties of soil?*

*How is soil alive? (Name biological components of soil)*

*How do the physical, chemical and biological properties of soil combine to create soil structure?*

*What are good gardening practices for protecting and creating healthy soil structure?*

### **Unit 2: Early Summer**

#### **Garden Installation**

*How and when to water for plant health and water conservation?*

*Identify plant stress caused by transplanting.*

*What are the requirements for transplanting? (Name stage of growth and environmental factors)*

*How do you determine spacing for direct seeding and transplants?*

#### **Botany**

*What is a plant?*

*Classify plants according to their life cycles.*

*How do the plant parts support the plant physiology?*

*Draw the pathways that water and nutrients take through a plant.*

*Explain the processes of photosynthesis and transpiration.*

*Give examples of seed dispersal methods.*

*Identify the components and functions of a flower.*

#### **Weed Management**

*Why is weed management important for plant health?*

*What are common weeds that we find in disturbed soils in New England?*

*Name three weed management practices and their application.*

### **Unit 3: Late Summer**

#### **Harvest Practices**

*What are harvest practices for preserving food quality?*

#### **Succession Planting**

*Describe how frost dates and days to maturation influence succession plantings.*

*How do day length and temperature impact fall successions?*



### **Plant Health Care, Integrated Pest Management, Organic**

*Define Plant Health Care, Integrated Pest Management and Organic. How do we apply Plant Health Care principles in garden maintenance? How do you anticipate the appearance of pests and disease in the garden? How do you determine your tolerance or threshold for pest and disease damage in the garden? What are common vegetable pests and diseases in New England?*

### **Unit 4: Fall**

#### **Seed Saving**

*Define hybrid, open-pollinated and self-pollinating.  
How do these types of seed impact seed saving?  
What are common methods for seed saving?  
What are proper conditions for seeds to be stored?  
How long are seeds viable?  
What are some of the cultural and political reasons for saving seeds?*

#### **Perennial and Bulb Installation**

*What is the ideal planting depth for bulbs?  
What factors do you consider when designing a bed with spring ephemerals?  
Describe the process you would use to layer various types of bulbs.  
What factors impact the timing of fall perennial plantings?  
What are the maintenance requirements for bulb and perennial plantings?*

#### **Garden Winterization**

*What are the main objectives in 'putting the garden to bed'?  
How might your techniques differ between an ornamental garden and a vegetable garden.*