



CURRICULUM GUIDE FOR GARDENING STUDY SCHOOLS

COURSE I

Total hours: 10

BASIC BOTANY FOR GARDENERS – Tested Subject – Open book option 2.5 hours

- A. Plant structure and organization
- B. How plants survive
- C. Reproduction
- D. Study of plant structure through a hand-magnifying lens, if available, or other visual aids

SOILS – Tested Subject 2 hours

- A. Definition
- B. Characteristics/structure
- C. Humus
- D. Soil testing
- E. Functions
- F. Soil mixes
- G. Roots in soils

HOUSEPLANT BASICS – Tested Subject 1.5 hours

- A. Selection
- B. Containers
- C. Soils and growing media
- D. Culture

PLANT PROPAGATION 1.5 hours

- A. Plants from seed
 - 1. Storage
 - 2. Germination
 - 3. Growing seedlings
 - 4. Transplanting
- B. Vegetative propagation
 - 1. Bulbs, roots, tubers, rhizomes
 - 2. Layering and stolons
 - 3. Stem and leaf cuttings
 - 4. Grafting or budding
 - 5. Tissue culture, if desired

PROPAGATION ACTIVITY 1.5 hours

Hands-on activity involving plant propagation.

SUPPLEMENTAL SUBJECT 1 hour

Refer to Suggested Supplemental Subjects on page 6



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COURSE II

Total hours: 10

UNDERSTANDING PLANT DISEASES AND GARDEN PESTS

2 hours

Tested subject – Open book test option

- A. Problem survey
- B. Controls
 - 1. Biological
 - 2. Chemical
- C. Pesticide safety
- D. Cultural practices
 - 1. Sanitation
 - 2. Crop rotation
 - 3. Interplanting
 - 4. Mulches
 - 5. Predators

Student to bring an example of plant material with evidence of insect damage or disease for identification and observation of problem (if location allows).

CONTAINER GARDENING – Tested Subject

2 hours

- A. Advantages
- B. Types of containers
- C. Types of plants
- D. General culture

TECHNIQUES FOR GROWING VEGETABLES – Tested Subject

2 hours

- A. Choice of varieties
- B. When to plant
- C. How to plant
- D. Pest control
- E. Rotation
- F. Interplanting
- G. Common problems
- H. Other cultural problems

HOW NEW PLANTS ARE DEVELOPED AND EVALUATED

1.5 hours

- A. By the professional plant breeder
- B. By the hobbyist
- C. Commercially
- D. Test gardens

TECHNIQUES FOR GROWING LAWNS AND/OR LAWN ALTERNATIVES

1.5 hours

- A. Site preparation
- B. Selection of grass and seeding or alternative choices
- C. Maintenance
- D. Lawn and/or lawn alternative problems

SUPPLEMENTAL SUBJECT

1 hour

Refer to Suggested Supplemental Subjects on page 6



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(Applicable to GSS Series beginning PRIOR to August, 2015)

COURSE III

Total hours: 10

FACTORS THAT INFLUENCE PLANT GROWTH – Tested subject – Open book test option
2 hours

- A. Environment
 - 1. Light
 - 2. Water
 - 3. Temperature
 - 4. Atmospheric conditions; effects of pollution
 - 5. Nutrients
- B. Heredity

PRUNING TECHNIQUES – Tested Subject 1.5 hours

- A. When, how and why
- B. Tools
- C. Results
- D. Demonstration, indoors and outdoors. Student participation encouraged.

TECHNIQUES FOR GROWING OUTDOOR FLOWERS – Tested Subject 1.5 hours

- A. Choice of varieties
- B. When and how to plant
- C. Pest control
- D. Training
- E. Rotation
- F. Common problems
- G. Landscape effects

TEACHING TOUR OF A BOTANICAL GARDEN 2.5 hours

If no botanical garden is available, a field trip may be substituted, as long as the following objectives can be met:

- A. Major plant family characteristics to be observed
- B. Local specifics to be considered may include:
 - 1. Bedding annuals
 - 2. Plants for flavoring
 - 3. Poisonous garden plants
 - 4. Weed collection
 - 5. Wild food plants

CLASSIFYING PLANTS (PLANT TAXONOMY) 1.5 hours

- A. A look at plants and plant-like organisms
- B. Some important families of flowering plants

SUPPLEMENTAL SUBJECT 1 hour

Refer to Suggested Supplemental Subjects on page 6



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COURSE IV

Total hours: 10

OUTDOOR IDENTIFICATION OF PLANTS – Tested Subject

3 hours

- A. Review major plant family characteristics
- B. Suitable key and glossary provided by instructor
- C. Plants to be studied with hand lens
- D. Identify major representatives of the plant families, *using the lens and key provided*

SPECIALIZED STYLES OF GARDENING – Tested Subject

2 hours

- A. Organic
- B. Greenhouse
- C. Shade gardens
- D. Water gardens, rock gardens, etc.
- E. Hot beds and cold frames

TECHNIQUES FOR GROWING WOODY ORNAMENTALS – Tested Subject

1.5 hours

Local specifics to be considered

- A. Choice of varieties
- B. When and how to plant
- C. Training
- D. Specific problems
- E. Necessary protections

TECHNIQUES FOR GROWING FRUIT

1.5 hours

Local specifics to be considered

- A. Choice of varieties
- B. When and how to plant
- C. Training
- D. Specific problems
- E. Necessary protections

HOME IRRIGATION TECHNIQUES

1 hour

- A. Water and drainage basics
- B. Methods of delivery, i.e. sprinklers, drip, bubblers, soaker hoses
- C. When and how much to water
- D. Grouping plants by similar water needs
- E. Water quality

SUPPLEMENTAL SUBJECT

1 hour

Refer to Suggested Supplemental Subjects on page 6



LIST OF SUGGESTED SUPPLEMENTAL SUBJECTS

The State GSS Chairman may suggest other subjects for approval by the Accrediting Chairman. Local interests will be considered.

- Bees, pollinators, beneficial insects
 - Botanical gardens or conservatories: program with visual aids and commentary
 - Butterfly gardening
 - Composting and recycling in the garden
 - Evolution of plants or geographic origins of garden plants
 - Exotic and rare plants
 - Fire-wise gardening
 - Gardening tools and resources
 - Growing bonsai, cacti & succulents, ground covers and vines, orchids, bromeliads, roses, herbs
 - Growing under lights
 - How to exhibit horticulture specimens in a flower show
 - Micro-environments in the garden
 - Native and/or edible wild plants
 - Non-flowering plants: i.e. fungi, grasses, mosses, club mosses, horsetails, ferns, etc.
 - Outdoor study and identification of native plants
 - Outdoor study of fungi and/or pests with hand lens
 - Pesticide study and safety
 - Planning and maintaining shade gardens or gardens for your particular region/soils/climates
 - Planting and maintenance of hanging containers. Student to mix soil and bring container
 - Planting bulbs to be forced. Instructions to be given and bulbs planted during class
 - Round-table discussion of selected topic with leader
 - Seeds, seed banks
 - Storage of fruits and vegetables
 - Study of tissue culture
 - Sustainable/eco-wise planning and planting
 - Training espaliers and topiaries
 - Visit a test garden where new varieties are grown, a water garden, an organic garden, bedding plant or hydroponics nursery or greenhouse
 - Water-wise gardening
 - Weed identification, treatment, and control
 - Wildflower appreciation and culture
- Any plant-related subject approved by the NGC Accrediting Chairman