# National Garden Clubs, Inc. Landscape Design Schools Curriculum

- We will include a segment in each course aimed specifically at redesigning a home landscape. Nearly all of our students live in suburban homes with existing landscapes. They want to make modest changes that do not require the services of a professional. This will not in any way encroach upon the turf of professionals and if more extensive design work is involved, it will allow the student to better communicate and understand the professional.
- We will emphasize the goals of NGC that relate to landscape design. Fundamentally we need to be aware of the environmental burdens the typical suburban lawn and a few shrubs places on the national landscape. Even moderate changes in planting choices and cultural practices can make significant impacts on the ecosystems around us.

**Course 1**

**A. Learning About Your Ecosystem (1 hour)**

- Our neighborhoods are environments. Our environments include all life, from bacteria, fungus and viruses to the tallest trees. Our environmental conditions include topography, geology (soils especially), climate and man-made structures and alterations to the environment for exploitation (agriculture, mining, landfill for building, altered river courses, etc.) It is vital to learn about our ecosystems before trying to create landscapes which are artificial ecosystems.

- From a purely practical standpoint, creating a landscape inimical to the prevailing ecosystem will be extremely costly in terms of manpower, inputs (chemical and hardscape) and the damage to the prevailing ecosystem. From an ethical standpoint creating a landscape that supports wildlife is a requirement. From an aesthetic stand-point there is nothing that will delight people more than flowers, birds and butterflies.

**B. Space, Design and People (1 hour)**

- Spatial structure
- Mass and void
- 3 space-defining components: earth: mounds and grading, plants, structures
- Spatial progression/sequence
- Spatial involvement by people

**C. Principles and Elements of Landscape Design (1 hour)**

- Design theory
- Approach to design
- Evolution of a design (design process)
- Organization of space for use and beauty
    - Art elements as building blocks for design principles
    - Design principles: balance, contrast, dominance, proportion, rhythm, scale
    - Design elements: color, form, light, line, pattern, shape, size, space, texture

**D. Developing Your Garden Plan (1 hour)**

- Basic steps in planning a landscape
    - Plot plan
    - Spatial use design aka blob diagram
    - Easements
    - Utility lines
    - Topographical features
        - Drainage
        - Paving
    - Structures
    - Plantings
- Determine environmental conditions
- Determine views: enhanced or hidden?
- Current and future family needs (list priorities)
- Define short-term and long-term goals

**E. Basics of a Site Plan (1 hour)**

- Methods of simple site measurements
- Common design documents
- Mechanics of delineation simplified
- Symbols of landscape plans
- Computer-aided design (CAD)
- Currently available amateur design software: advantages and pitfalls

**F. Color in the Landscape (1 hour)**

- Color perception in landscape design
- The color wheel
- Colors and emotional responses
- Color variations in plants, including foliage, flowers, fruits, seeds, bark
- Seasonal color
- Incorporating hardscape with plantings to tell a color story
- Design unity through color harmony

**G. Design for the Environment (1 hour)**

- Identifying your ecosystem
- Plant ecology: native plants, exotic invasive plants
- Designing with sound site-planning practices
- Designing for pollinators
    - Native Plants as host plants are vital
    - Creating corridors
- Indigenous materials
- Energy conservation, especially seasonal
- Sound water management: xeriscaping, rain gardens, water barrels
- Maintenance reduction
- Cost-effective design

- Implementation practices

**H. Development of Landscape Design: Ancient Times to 1840 (1 hour)**

Landscape design as influenced by environmental and societal factors…

- Mesopotamian design
- Egyptian design
- Medieval enclosures
- Muslim influence in Spain
- Renaissance order
- English Landscape design 1600-1840

**I. Xeriscaping: Not Just for the Desert (1 hour)**

- Water-wise gardening
- Well-considered landscape design
- Appropriate drought-tolerant plants
- Reduction or elimination of turf
- Rainwater capture and/or efficient irrigation
- Soil analysis and amendments
- Mulches (including organic, inorganic and living)
- Maintenance

**J. Special interest topic (1 hour)**

**Course 2**

**A. Landscape Design Process 1 (1 hour)**

Program: understanding or creating a program

- Goals of the design
- Uses/purposes of the space
- Problem Areas, eg. Dining area, screening, agricultural, environmental, entertaining
- Budget
- Style/theme
- Lighting
- Drainage

Site Analysis: understanding the site's opportunities and constraints

- Reading the existing terrain
  - Sun/shade
  - Drainage/irrigation
  - Hardiness and Heat Zones
  - Soil characteristics
  - Interpreting the site's natural scale
- Understanding the site's history
- Wetland buffers
- Local/state regulations including zoning restrictions, regulatory agencies
- Zoning restrictions

Concept Plan: creating a broad-stroke plan for the design

- Designating main nodes/gathering areas
- Creating connections/circulation
- Creating a hierarchy within nodes and circulation
- Organizing the spaces
- Utilizing existing topography, designing with the land

**B. Designing for Pollinators and Wildlife (1 hour)**

- Importance of interrelationships of living organisms
- Layers in wild landscapes
- Layers in home gardens
- Ecological functions/dysfunctions of gardens
- Plants appropriate to your area

**C. Plants in the Landscape (1 hour)**

- Functional role of plants in the landscape: climate, architecture, sound, erosion, circulation control
- Microclimates
- Design Principles and elements
- Development of a planting plan
- Softscape definition
- Horticultural characteristics
- Climatic tolerance
- Soil conditions
- Environmental factors
- Growth
- Habit
- Longevity
- Disease and pest tolerance
- Role in the garden ecosystem

**D. Accessible, Enabling and Therapeutic Gardens (1 hour)**

- The five senses
- Raised beds
- Container gardening
- Vertical gardening
- Better tools
- Plant selection

**E. Structures in the Landscape (1 hour)**

- Hardscape's functions
- Steps, walls, fences, enclosures
- Methods of construction
- Role of design implementation
- Short vs long-term economics of choices: maintenance, life-expectancy
- Post-construction review and evaluation

**F. Redesign of Areas (1 hour)**

- Reasons for redesign:
    - Defective materials
    - Overgrown plantings
    - Changes in lifestyle, social patterns and neighborhood
- Maintenance capabilities
- Safety & security measures
- Examples of public and private redesign

**G. Development of North American Landscape Design (1 hour)**

- Native American shaping of the landscape
- Colonial social, economic and political influences: Spanish, Dutch, English, French
- Early colonial gardens: food and medicine
- Gardens of the Eighteenth and Nineteenth Century: "use and delight"
- Twentieth century: the age of the lawn (the anti-garden)

**H. Preservation of Historic Sites and Structures (1 hour)**

- Role of historic heritage as communicated by sites and structures
- Historic preservation provides a tangible culture memory and environmental diversity
- Degrees of preservation:
    - Preservation
    - Restoration
    - Adaptive reuse/rehabilitation
    - Reconstruction
- Historical designations and how to achieve official status
    - National Register of Historic Places
    - National Trust for Historic Preservation
    - Defining historically significant segments of a site
    - Maintenance of historical integrity
- Preserving natural and built landscapes from these standpoints:
    - Culture
    - Economics
    - History
    - Aesthetics
- Case study

**I. Overused, Often Invasive Plants and Native Alternatives in Your Area (1 hour)**

- Definition of invasive exotic plants
- How exotic invasives create dead zones in the landscape
- Definition of native plants
- How native plants feed the insects that feed the birds etc.
    - Bringing Nature Home by Doug Tallamy
- Nativars dispute
- Local resources for information about exotic invasives
- Local resources for learning about native plants
- Local sources for purchasing native plants

**J. Special Topic (1 hour)**

## Course 3

**A. Landscape Design Process 2 (1 hour)**

- Design Development
- Defining shapes
- Dimensioning spaces
- Shaping the land, developing surface drainage and grading
- Incorporating design elements, features and details
- Construction material choices
- Planning ahead for future expansion or changes (conduit sleeves, irrigation, lighting, audio)
- Construction Documents, Planting, Lighting and Final Touches.
  After developing the site layout, the planting and lighting should reflect and complement the spaces.
- Subtle lighting, safety
- Creating a lighting design that guides you through the space in the desired directions
- Creating a planting design that highlights key features, and complement the design style
- Four season interest planting design

**B. Woody Plants in the Landscape (1 hour)**

- Woody plants are the backbone of the landscape**.**
- Tree and/or shrub (pruning options)
- Deciduous and evergreen plants and their role in the landscape
- How large will it be? Plant tags may be deceptive in warmer climates.
- Siting correctly to prevent foundation, walkway and roof damage
- Creating a pleasing rhythm with woody plants
- Recommended woody plants for the area
- Siting, planting and maintenance

**C. Herbaceous Materials in the Landscape (1 hour)**

- Seasonal displays
- Color schemes
- Succession of blooms
- Planting, maintenance, dividing
- Appropriate native plants for the area

**D. Landscape Design with Maintenance in Mind (1 hour)**

- How will design limitations, structural characteristics and plant selection affect maintenance?
- Requirements for hardscape and softscape elements in the landscape
- Maintenance budget and personnel is a crucial consideration in designing.
- Resource-efficient development
- Plan ahead, especially for public landscapes.

**E. Suburban Design (1 hour)**

- The domination of suburbs and their landscaping
- How just “a lawn and some foundation plantings” affects wildlife
- Balancing the maintenance load with the desire to garden responsibly
- Suburban restrictions and local government restrictions and variances
- Alternatives to lawn

**F. Graphics Interpretation (1 hour)**

- Architectural materials
- Reading a landscape plan and understanding engineer scale vs. an architectural scale
- Elementary plans and evaluations
- Liaisons: designers, horticultural consultants, civic committees, planning agencies
- Common design documents:
    - Bubble plans
    - Concept/presentation drawings
    - Construction detail drawings and specifications
    - Final “as built” plans

**G. Creating Your Own Home Garden Landscaping Plan (3 hours)**

Students will each bring an accurately measured drawing of an small area of their landscape that they would like to redesign. They will use their knowledge from the first two courses to create a list of their requirements, restrictions and the conditions of the site. The Instructor will work with them to create a workable design. Good ideas for this project would include an herb garden, a cutting garden or a garden dedicated to a specific genus (Iris, Hosta, Roses, Daylilies, etc.) Master Landscape Design Consultants may serve as instructor's aides.

**H. Special Interest Topic (1 hour)**

**Course 4**

**A. Contemporary Landscape Design Trends (1 hour)**

- The Modern Movement (1930s-40s)
- Integration of landscape design and structures (especially residential)
- Contemporary uses of softscape and hardscape materials
- Conservation of non-renewable materials
- Native plants
- Latest trends

**B. Community Participation in Landscaping Projects (1 hour)**

- How to initiate a civic project
- Suitable projects for community groups
- Crucial considerations: Maintenance & Funding
- Pitfalls:
    - Over ambitious project--start small
    - Lack of maintenance commitment
    - Vandalism

- Requirements for professional inputs in major projects
- Case study

**C. History and Development of Community Gardens (1 hour)**

- Benefits
- Evolution of the community garden from the 1890s to the present
- Permanent resources in food deserts
- Creating community and recreating a connection with the land
- Developing a community garden
    - Land tenure
    - Community outreach
    - Engaging a wider network of support

**D. Evaluating Your Landscape Plan (1 hour)**

Students will bring the plans they have worked on since Course 3. The Instructor will examine the plans and make suggestions as needed.

**E. Guidelines for Evaluating Landscape Designs of Residential, Public and Residential Property (1 hour)**

Introduce the NGC LDS Landscape Evaluation form and explain its use.

**F. Evaluations of Landscape Designs (4 hour lecture/tour)**

Students need an NGC LDS Landscape Evaluation form for each site. They need pencils, because they may change their minds as they walk through the entire property.

**G. Special Interest Topic (1 hour)**