Welcome to our catalog, which we hope finds you managing your way through this challenging year, where the whole world has had to reimagine what we mean by work, home, and learning.

Back in mid-March, when the Garden temporarily closed, Adult Education was able to adapt quickly to remote learning, with our incredible instructors offering some 200 online classes.

Over these many months, we’ve seen people looking to embrace nature as never before. They are seeking out that class in botanical drawing or vegetable gardening or flower arranging they’ve always wanted to take. And they’re realizing that, even online, it’s possible to stay connected in meaningful ways.

We’re so grateful to you—our community of gardeners, designers, artists, naturalists, and crafters—for supporting us and giving the feedback that’s helped us strengthen our online efforts and get better every day.

This fall we’re building on what we’ve learned—to help you make progress towards your Certificate, or begin a new journey of discovery. So—as always—you’ll find enriching courses in many disciplines; you’ll develop new skills and credentials, and meet amazing instructors.

Nearly all NYBG classes will be fully online. But in our Horticulture, Botany, and Urban Naturalist programs that require hands-on, outdoor learning, we’re offering blended classes that meet partly online and partly on Garden grounds.

We’re also continuing our signature lecture series with important, inspiring speakers—from the great landscape and public artist Walter Hood, to psychotherapist-gardener Sue Stuart-Smith, whose remarkable new book, The Well-Gardened Mind, reminds us that the garden can “buffer us when the going gets tough.”

That same hopeful feeling is woven throughout our NYBG Adult Ed community. We look forward to welcoming you all back in person as soon as possible. But meanwhile, we’re so glad we can continue the work of learning and growing together virtually.

Take care—and we’ll see you in class!
“I have taken class from some of the best, and these online classes at NYBG have really been a cut above. My goodness what a bright, beautiful spot in a troubled world. Thank you for making such a difference in my life!”

— SUSAN BARTOW, Current Student

ABOUT THE COVER: Shishigatani kabocha, Akiko Enokido Official Entry

The Fourth NYBG Triennial
Abundant Future: Cultivating Diversity in Garden, Farm, and Field

This rare and historic heirloom Japanese pumpkin dates from the Edo period, and is highly valued in Kyoto cuisine. The image—along with other artwork seen throughout the catalog—is featured in this year’s virtual botanical art exhibition, which showcases heirloom plants and their wild relatives, and highlights their critical role in increasing and preserving genetic diversity.

It’s also a reminder that pumpkins take center stage at NYBG this October. Come see our vast display of gorgeous cucurbits—including some of the world’s largest and most spectacular!

On the cover: Kabocha Pumpkin, Shishigatani kabocha, Watercolor on paper, ©Akiko Enokido
22nd Annual Landscape Design Portfolios Lecture Series

LANDSCAPES ON THE EDGE

Three gifted landscape architects push the boundaries of invention with designs for urban waterfront parks that exhibit an extraordinary confluence of art, science, nature, and narrative.

THOMAS BALSLEY, FASLA

Hunter’s Point South Park and Beyond: A New Paradigm for Resilient Waterfronts

Tom Balsley is a world-renowned landscape architect whose NYC-based studio, SWA/Balsley, is best known for its fusion of landscape and urbanism into award-winning parks and waterfronts, often found in the margins and post-industrial edges of cities. Sparking the public’s imagination, he has reshaped urban public realms throughout the world with robust and sustainable civic spaces that teem with public life and are the source of a warm community embrace. Balsley has created over 100 such spaces in NYC alone, including the highly acclaimed Hunter’s Point South Park, dual winner of ASLA’s Honor Award in 2014 and 2019. His presentation will feature this extraordinary new park which has emerged as a global model for resilient waterfronts that is both urban and other-worldly. Others include Gantry Plaza State Park, Chelsea Waterside Park, Main Street Garden Park, Paveltyskaya Park in Moscow, and Nelson Mandela Park in Rotterdam.

A noted speaker, he has taught and lectured at Harvard GSD and Penn Design. His work earned him ASLA’s prestigious National Design Medal and a monograph “Thomas Balsley Uncommon Ground” found in MoMA.

October 5 | 212LAN801BO

GINA FORD, FASLA

Design as an Act of Optimism: 21st-Century Landscapes

Gina Ford is the co-founder and principal of Agency Landscape + Planning, in Cambridge, MA, a practice dedicated to addressing social equity, cultural vitality and environmental resilience through design excellence, strategic planning and community engagement. A recipient of the Harvard Graduate School of Design’s Charles Eliot Traveling Fellowship, Ford is personally committed to the design of public places, and her many honors include awards from the American Society of Landscape Architects, the American Planning Association, and the American Institute of Architects. She will focus on Chicago’s Riverwalk, for which she was the lead designer of the Sasaki team while a principal at that firm. For this project, new land was added along the Chicago River to create a continuously connected, public space that includes aquatic habitats, boating wetlands and fishing piers. An award-winning project, Riverwalk transformed an iconic part of downtown Chicago.

Gina Ford will be in conversation with Agency principal, urban planner Brie Hensold, and they also will discuss new projects in Sarasota, Florida; Indianapolis’ White River; and Boston’s Lawn on D.

October 19 | 212LAN801CO

WALTER HOOD

Landscape and Community: A Commemoration

As founder and creative director of Hood Design Studio in Oakland, California, Walter Hood makes urban spaces that resonate with and enrich the lives of current residents while also honoring communal histories. As an artist and a landscape architect, he has transformed traffic islands, vacant lots, and freeway underpasses into spaces that challenge the legacy of neglect of urban neighborhoods. Recently, Hood has undertaken ambitious commemorative landscapes that reflect his interest in the role of sculpture in public space. For Charleston’s International African American Museum, now under construction on the site at which nearly 40 percent of enslaved Africans arrived in this country, Hood has designed a memorial garden filled with native grasses, featuring a tidal pool whose waters will recede at regular intervals to reveal an engraved pattern of life-sized figures, aligned as though confined within the hold of a slave ship.

Widely published, and known internationally as a lecturer, Hood is a professor of landscape architecture at UC Berkeley. In 2019, he received both the Dorothy and Lillian Gish Prize and a MacArthur Fellowship.

October 29 | 212LAN801DO

Registration fee for each lecture: $15/$18. Register for the series and receive a discount: 212LAN801AO | $39/$49

SUSAN COHEN, FASLA, RLA, COORDINATOR OF THE LANDSCAPE DESIGN PROGRAM, ORGANIZED THIS SERIES.

SUPPORT GENEROUSLY PROVIDED BY THE HEIMBOLD FAMILY.
21st Annual Winter Lecture Series

GARDENS OF MEANING

This year’s speakers approach the garden from non-traditional perspectives—healing, inclusiveness, and music—that add new layers to our notions of beautiful spaces and the gardening experience.

SUE STUART-SMITH

The Well-Gardened Mind
Distinguished psychiatrist and avid gardener Sue Stuart-Smith believes our minds and our gardens interact in ways that can sustain our innermost selves. Her beautifully-written UK bestseller, The Well-Gardened Mind, offers inspiring perspectives on the power of gardening to change people’s lives.

For Stuart-Smith, a garden is much more than a beloved physical space. It is a mental space where you can hear your thoughts immersed in the primal awareness not only of nature’s beauty, but the eternal cycle of the seasons. Informed by literature, neuroscience and her experiences as therapist and gardener, she celebrates the joys of gardening, but also the life-affirming benefits of tending plants—physical, psychological and metaphorical.

Before practicing as a psychiatrist and psychotherapist, Sue Stuart-Smith received her degree in English literature at Cambridge. Over the past 30 years, she has worked with her husband, leading UK garden designer Tom Stuart-Smith, on their wonderful Barn Garden in Hertfordshire.

January 28 | 213GAR801BO

LESLEI BENNETT

Gardens of Sanctuary
Founder and owner of Pine House Edible Gardens, Leslie Bennett designs, builds, and maintains edible and culturally resonant landscapes that are beautiful and productive. The gardens she creates provide visual, physical, and cultural inspiration—along with nourishing organic harvests of food, flowers and medicinal herbs. With degrees from Harvard, Columbia Law School, and University College London in the fields of environmental law, cultural property, and social justice, Bennett brings a rare and important perspective to her landscape designs and her business practices. One effort of Pine House Edible Gardens is the Oakland, CA-based Black Sanctuary Gardens project, founded by Bennett in 2018, which actively works to create garden spaces of refuge and beauty in collaboration with Black women and communities.

Recently, Leslie Bennett received the American Horticultural Society’s 2020 Great American Gardeners Landscape Design Award. She is co-author of The Beautiful Edible Garden, and has been featured in Better Homes & Gardens, Martha Stewart Living, and Garden Design. Joining Bennett in conversation will be Jennifer Jewell, creator and host of the award-winning public radio program and podcast Cultivating Place.

February 25 | 213GAR801CO

LARRY WEANER

Music Composition and Landscape Design: Harmony, Rhythm, & Time
For landscape designer and composer Larry Weaner, garden design and music composition have much in common. While one may be visual and the other sonic, both look to explore freedom of expression within formal constraints. Both are endlessly engaging pursuits, where no matter how much you know…there is always more to discover. Working with plants—like playing jazz—is a give and take, a call and response, where every action stimulates a reaction—with sometimes unexpected consequences. Weaner believes that understanding the principles and techniques of composition can help designers create “musical” landscapes that can evoke powerfully direct emotional responses, reveal themselves gracefully over time and the seasons, and incorporate elements of improvisation.

Larry Weaner is a leading figure in North American landscape design and restoration. His award-winning work has been profiled in The New York Times, Garden Design, and Landscape Architecture Magazine, among other publications. His Garden Revolution: How Our Landscapes Can Be a Source of Environmental Change received the 2017 Book Award from the American Horticultural Society.

March 25 | 213GAR801DO

Registration fee for each lecture: $15/$18. Register for the series and receive a discount: 213GAR801AO | $39/$49

Funded in part by the Barbara Cushing Paley Fund.
Contemporary botanical art captures the beauty of the natural world with precision, and our extraordinary instructors share their expertise in this nurturing yet rigorous program. NYBG offered North America’s first formal botanical art certificate program, and has remained a leader in the discipline for more than three decades. Whether you are looking for personal enrichment or a professional credential, the NYBG Certificate is a prestigious indicator of mastery and accomplishment.

THE CERTIFICATE PROGRAM

The Botanical Art & Illustration requirements provide a solid foundation in scientifically accurate drawing based on observation and fine art techniques in a variety of media. Those who achieve the highest level of accomplishment receive a Certificate in Botanical Art & Illustration with Honors, an indication of superior work. For full program details and requirements for graduation, please visit nybg.org/adulted.

CLASS MATERIAL: A materials list for every class is included in the course description on our website and in your confirmation email.

HOMEWORK: Homework will be assigned and it is expected that it will be completed in order to fully benefit from the class.

Blue Hubbard, Cucurbita maxima ‘Blue Hubbard’, Colored pencil on paper, ©Tammy S. McEntee, 2017 Graduate
CERTIFICATE REQUIREMENTS
These core classes provide a strong, well-rounded foundation that prepares
the student for higher-level classes. These classes can also be taken singly.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botanical Drawing I: Methods and Materials</td>
<td>BIL 301</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>Botanical Drawing II: Developing Your Skills</td>
<td>BIL 302</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>The Basics of Visual Composition (should be</td>
<td>BIL 421</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>completed early)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botanical Drawing III: Focus on Flowers</td>
<td>BIL 303</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Plant Morphology for Botanical Artists</td>
<td>BIL 300</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>Botanical Watercolor I</td>
<td>BIL 331</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>Practical Aspects of Botanical Art</td>
<td>BIL 392</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

*Plus one of the following:

- Internet Tools for Creatives, Part I: Social Media BIL 394 5 6
- Internet Tools for Creatives, Part II: Website BIL 395 7 6
- Pen and Ink BIL 400 18 6
- Colored Pencil BIL 415 18 6

Elective courses 54
TOTAL REQUIRED HOURS 221*

ELECTIVES
Students seeking a Certificate may focus their electives on watercolor,
colored pencil, drawing—or they may choose a natural science concentration.
Elective courses build on foundation skills and allow the student to tailor
their direction of study.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Harvest on Kraft Paper</td>
<td>BIL 455</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Refined Graphite Rendering</td>
<td>BIL 370</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Botanical Watercolor II</td>
<td>BIL 332</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>Scaling Up: Enlarging the Specimen</td>
<td>BIL 349</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Hummingbirds</td>
<td>BIL 382</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Drawing Mammals</td>
<td>BIL 358</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Ink Wash Techniques</td>
<td>BIL 407</td>
<td>15</td>
<td>7</td>
</tr>
</tbody>
</table>

*Plus a final project that meets Certificate standards
P Courses with a prerequisite before you can register

QUESTIONS? CONTACT PROGRAM COORDINATOR
ROBIN JESS AT BILCOORDINATOR@NYBG.ORG

The Tri-State Botanical Artists of NYBG
TSBA is a lively group of over 90 artists who meet to engage in
critiques, monthly art challenges, a sketchbook exchange, and
topical discussions. We invite all current Certificate students and
alumni to join us! TSBA is recognized as an ASBA Circle. Meetings
are free and held once a month via Zoom until it is safe to meet
again at NYBG. See p. 35 for more information.
Weekend watercolor
Online Workshops

Capture the beautiful colors and unique details of different botanical subjects. No previous drawing or painting experience is necessary.

NEW! ORNAMENTAL PUMPKINS
Sunday, 10/4, 10 am–3:30 pm
Sarah Wry | Online | 212BIL229O

NEW! CHINESE LANTERNS
Saturday, 10/17, 11 am–4:30 pm
Adele Rossetti | Online | 212BIL257O

FALL LEAVES
Sunday, 11/1, 10 am–3:30 pm
Laura Vogel | Online | 212BIL203O

NEW! PURPLE CONEFLOWERS
Saturday, 1/23, 11 am–4:30 pm
Adele Rossetti | Online | 213BIL253O

NEW! PINE CONES
Sunday, 2/7, 10 am–3:30 pm
Laura Vogel | Online | 213BIL274O

ORCHID FLOWERS
Sunday, 3/7, 10 am–3:30 pm
Laura Vogel | Online | 213BIL225O

Registration fee for each section: $95/$105

Focus on dry brush!

NEW! GALA APPLES IN DRY BRUSH WATERCOLOR
Saturday, 11/21, 11 am–4:30 pm
Carrie Di Costanzo | Online | 212BIL263O

NEW! POMEGRANATES IN DRY BRUSH WATERCOLOR
Sunday, 1/10, 11 am–4:30 pm
Carrie Di Costanzo | Online | 212BIL258O

NEW! ACORN SQUASH IN DRY BRUSH WATERCOLOR
Saturday, 2/20, 11 am–4:30 pm
Carrie Di Costanzo | Online | 213BIL242O

Registration fee for each section: $125/$135

BOTANICAL DRAWING III: FOCUS ON FLOWERS
Apply your understanding of contours, perspective, and tone to accurately draw three distinct, fully-toned flowering plants. Explore compositional possibilities, textures, and details. [Botanical Drawing II] $435/$479 Certificate Requirement
6 Fridays, 1/8–2/12, 11 am–2 pm
Rose Marie James | Online | 213BIL303AO

BOTANICAL WATERCOLOR I
This comprehensive class covers the basics. Learn how to use your brushes to make smooth, underlying washes, and create fine detail. Color theory teaches you how paints interact, and how to select the right colors for your subject. Paper selection, transferring preliminary drawings, and more round out this strong foundation. [Botanical Drawing II] $569/$625 Certificate Requirement
8 Thursdays, 10/22–12/17 (no class 11/26), 10:30 am–1:30 pm
Laura Vogel | Online | 212BIL331CO

COLORED PENCIL
Colored pencil can be applied to look like either drawing or painting, making it a versatile medium for botanical art. Learn a variety of techniques including burnishing, tonal construction, and layering colors for different hues and densities. [Botanical Drawing II] $435/$479 Certificate Requirement
6 Saturdays, 10/17–11/21, 11 am–2 pm
Laura Vogel | Online | 212BIL415BO

PEN AND INK
Pen and ink, so versatile and useful, can be used to create high-quality, easily reproducible drawings. Learn to produce different strokes and create tone by using stipple, line, and crosshatch techniques. [Botanical Drawing II] $435/$479 Certificate Requirement
6 Fridays, 10/16–11/20, 11 am–2 pm
Carol Ann Morley | Online | 212BIL400AO

8 Wednesdays, 10/7–12/9
(no class 11/11 & 11/25), 10 am–12:30 pm
Dick Rauh | Online | 212BIL300AO

INTERNET TOOLS FOR CREATIVES PART I: SOCIAL MEDIA
Learn to develop and implement a Facebook, Instagram, Twitter, and Pinterest strategy to showcase your work and attract and engage followers. A smartphone with aforementioned apps pre-installed is required. $115/$129 Certificate Requirement
2 Sundays, 1/31 & 2/7, 11 am–1:30 pm
Candace Thompson | Online | 213BIL394O

INTERNET TOOLS FOR CREATIVES PART II: WEBSITE
A professional online presence is key to growing your business. In this hands-on class, you’ll build a simple website (no coding required!) to showcase your portfolio using the free Wix.com platform and free online photo-editing tools. Internet proficiency necessary. $155/$169 Certificate Requirement
3 Thursdays, 1/14–1/28, 5–7:20 pm
Candace Thompson | Online | 213BIL395O

PLANT MORPHOLOGY FOR BOTANICAL ARTISTS
Examine the enormous variety of forms and structural adaptations of flowering plants—the world’s dominant plant group. Through lectures, demonstrations, and laboratory studies, learn to recognize and draw the many parts and growth stages of the most common plant families. [Botanical Drawing II] $495/$545 Certificate Requirement
8 Wednesdays, 10/4–12/16, 10 am–2 pm
Dick Rauh | Online | 212BIL300AO

Illustration: Bejeweled Indian Corn, ©Anastasia Traina, 2019 Graduate
### THE BASICS OF VISUAL COMPOSITION
In a variety of exercises, we’ll explore principles, including balance, focal points, and the rule of thirds, that give your composition maximum impact. Each week, you’ll add to your personal composition notebook—an invaluable reference for the future. Your final drawing pulls together everything you’ve learned. This class is best taken early in your Certificate program. [Botanical Drawing II $449/$495 Certificate Requirement](#)

4 Saturdays, 2/6, 2/20, 3/6 & 3/20, 10 am–3 pm
Betsy Rogers-Knox | Online | 213BIL421O

### PRACTICAL ASPECTS OF BOTANICAL ART
These two sessions cover the basics: dealing with galleries and artists’ reps, including pricing, contracts, and sales agreements; how/when to sell certain rights; how to market your work through promotional printing and making products; as well as licensing. How to prepare for entering an exhibition or developing your own one-person show will round out the concepts. [Watercolor or Colored Pencil $245/$269 Certificate Requirement](#)

4 Fridays, 2/19–3/12, 10:30 am–1 pm
Carol Woodin | Online | 213BIL392O

### NEW! FALL HARVEST ON KRAFT PAPER
Bring the colors and warm tones of fall to life through a seasonal journal on Stonehenge kraft paper. With its mid-tone background, learn how kraft paper creates an old world look and allows for vibrant colors, dramatic light, and dark application. Using watercolor and colored pencil, learn painting techniques as you focus on drawing fall subjects—such as acorns, squash, pumpkins, and more. [Botanical Drawing II $395/$435 Certificate Elective](#)

4 Tuesdays, 10/20–11/10, 11 am–2:45 pm
Wendy Hollender | Online | 212BIL455O

### Refined Graphite Rendering
Though graphite is generally considered to be most beneficial in producing sketches or “studies” for more complete drawings and paintings, it can also be used to produce finished illustrations suitable for publication in scientific journals. Using pencils of various densities, participants in this workshop will learn how to create a range of linear effects and crisp detail. The application of tone through the use of tortillions and graphite dust will result in drawings that “minimize the evidence of the medium”—that is, achieve the appearance of fully-realized renderings. [Botanical Drawing II $295/$325 Certificate Elective](#)

3 Sundays, 10/25–11/8, 11 am–4:30 pm
Scott Rawlins | Online | 212BIL370O

### Botanical Watercolor II
Practice techniques learned in Botanical Watercolor I using live subjects such as leaves, stems, and fruit. Emphasis is on realistic portrayal of botanical subjects and traditional methods of dry brush watercolor painting, with attention to detail and color accuracy. We recommend that students take Botanical Watercolor II immediately following Botanical Watercolor I. [Botanical Watercolor I $435/$479 Certificate Elective](#)

6 Mondays, 11/30–2/1 (no class 12/21, 12/28, 1/4, & 1/18), 5:30–8:30 pm
Rose Marie James | Online | 212BIL332O

### SCALING UP: ENLARGING THE SPECIMEN
The architecture of tiny flowers and fruit is fascinating and rendering them accurately requires enlargement. Learn best practices for viewing and measuring samples. Explore different techniques to scale them up as you paint the enlarged drawings in watercolor. Botanical specimens will be provided. [Botanical Watercolor II $239/$265 Certificate Elective](#)

5 Thursdays, 3/18–4/15, 10 am–12 pm
Dick Rauh | Online | 213BIL349O

### HUMMINGBIRDS
Hummingbirds play a key role in the pollination of many flower types and can add lively interest to your botanical art. You’ll learn the anatomy, habitat, and behavior of these diminutive birds, as well as techniques for rendering their vivid hues in colored pencil, watercolor, or graphite. While we will work from photographs, we’ll also share tips for sketching in the field. [Prerequisite: Botanical Drawing II $289/$319 Certificate Elective](#)

4 Tuesdays, 2/2–2/23, 11 am–2 pm
Mary Christiansen | Online | 213BIL382O

### IN-PROGRESS PORTFOLIO CRITIQUE
As a developing artist, you need personalized, supportive evaluation to improve. This is your chance to bring your finished art and work-in-progress for respectful, careful feedback via group discussion and teacher-led demos. Are your details complete? Are your tonal values correct? Works in colored pencil, graphite, or watercolor are welcome. This class is highly recommended for Portfolio candidates. [$119/$129](#)

Wednesday, 2/17, 10 am–3:30 pm
Robin Jess | Online | 213BIL208O

### DRAWING MAMMALS
From gerbils to giraffes, and big cats to house cats, mammals make inspiring subjects. Learn the basic anatomy common among mammals, including underlying skeletal and muscular structures to help you create realistic renderings. Develop techniques to address subtle differences in hair and fur patterns, eyes, ears, feet, and teeth. You’ll work from photographs and you are welcome to work in any medium with which you feel technically comfortable. [Botanical Drawing II $359/$395 Certificate Elective](#)

3 Sundays, 2/21–3/7, 11 am–4:30 pm
Ariel Fleming | Online | 213BIL358O

### NEW! INK WASH TECHNIQUES
If you’re looking to transition from drawing to watercolor painting or fine tune your watercolor techniques, this class is for you. You will practice basic techniques such as flat washes, glazing, graded washes, and dry brush for fine details. Dilutions of India ink and earth tone inks will be used to depict botanical and natural science subjects. Please have sample drawings on hand for the first class. [Botanical Drawing II $359/$395 Certificate Elective](#)

3 Tuesdays, 3/9–3/23, 10 am–3:30 pm
Laura Vogel | Online | 213BIL407O

---

**REGISTER ONLINE AT NYBG.ORG/ADULTED OR CALL 800.322.NYBG (6924)**
Botany

A botany class gives you a deeper understanding of how plants connect us to the natural world, and can be your gateway to herbal healing, cross-cultural understanding, or appreciation of nature’s seasonal beauty.

THE CERTIFICATE PROGRAM

The NYBG Botany Certificate courses in subjects such as native flora, ethnobotany, ecology, and botanical nomenclature reflect the Garden’s strengths in botanical science research, as well as its world-famous and unequalled resources—the William and Lynda Steere Herbarium, housing 7.8 million dried plant specimens, and the LuEsther T. Mertz Library, with its 550,000 volumes, 12,000 serial titles, and 11 million archival documents.

Over the course of the program, students will come to know how plants function, grow, develop, and reproduce—and learn to identify a wide array of plants by stems, leaves, flowers, and fruit.

Mutual Dependence, *Ficus punctata*, Watercolor on paper, ©Eunike Nugroho
QUESTIONS? CONTACT PROGRAM COORDINATOR
JAMIE BOYER, PH.D., AT JBOYER@NYBG.ORG

CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours*</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature’s Pharmacy</td>
<td>BOT 346</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Botanical Latin</td>
<td>GAR 360</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Forest Ecology</td>
<td>BOT326</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Basic Plant ID</td>
<td>BOT 308</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Paleobotany: The Origin of Plants</td>
<td>BOT 434</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Autumn Mushrooms</td>
<td>BOT 368</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Ethnobotany: A Practitioner’s Approach</td>
<td>BOT 344</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Psychedelic Mushrooms</td>
<td>BOT 302</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>The Science of Tree Communication</td>
<td>BOT 385</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Pressing Plants For Art &amp; Science</td>
<td>BOT 338</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Winter Mushrooms</td>
<td>BOT 394</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Nature’s Recording Device</td>
<td>BOT 397</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

*Course hours do not include exam hours
**Courses offered in the Spring–Summer Catalog
Courses with a prerequisite before you can register

CERTIFICATE CLASSES

PRESSING PLANTS FOR ART & SCIENCE
Learn techniques and skills for collecting and preserving museum-quality plant specimens. Build your own herbarium, a permanent record and aid for Botany and Horticulture courses—or for artistic appreciation. Outside only; rain or shine. $365/$395 Certificate Elective

4 Fridays, 9/25–10/16, 2–5 pm
Daniel Ata and Catherine Ahn | NYBG | 211BOT338

FOREST ECOLOGY
Explore the basic principles that influence the ecological relationships of the forest ecosystem using the Garden grounds as a site for observation and field study. Blended class; online and on-site. | $295/$325 Certificate Elective

5 Saturdays, 10/3–11/7 (no class 10/10), 9:30 am 
Stephanie Schmiege | NYBG & Online | 212BOT326BL

PALEOBOTANY: THE ORIGIN OF PLANTS
Paleobotany, the study of plant evolution through fossil evidence, gives us insights into Earth’s flora, past and present. Gain a historical perspective on global diversity and climate change, and the origin and development of present-day trees and flowering plants. | $295/$325 Certificate Elective

5 Mondays, 10/5–11/9, (no class 10/12), & 1 Tuesday, 10/13, 5–7 pm
Jamie Boyer, Ph.D. | Online | 212BOT434AO

BASIC PLANT ID
This is the class for plant-lovers eager to up their game! Learn the terminology and basic botanical nomenclature that will help you recognize and describe key differences in common plants. | $145/$159 Certificate Elective

3 Tuesdays, 10/6–10/20, 5–7 pm
Clara Holmes | Online | 212BOT308AO

3 Thursdays, 1/21–2/4, 6–8 pm
Clara Holmes | Online | 213BOT308BO

BOTANICAL LATIN
Botanical Latin is essential for anyone with a serious interest in identifying plants. But, contrary to popular belief, mastering Latin plant names need not be intimidating or boring. Review the rules of taxonomy, Latin grammar, and pronunciation, and learn the history of the binomial system in use today. | $255/$279 Certificate Elective

5 Thursdays, 10/22–11/19, 6:15–8:15 pm
Jennifer Bakshi | Online | 212GAR360BO

5 Thursdays, 1/7–2/4, 10:30 am–12:30 pm
Jennifer Bakshi | Online | 213GAR360CO

5 Mondays, 3/8–4/5, 6:15–8:15 pm
Jennifer Bakshi | Online | 213GAR360DO

NATURE’S PHARMACY
Discover the many herbs and spices prized for centuries to heal, to revitalize the immune system, and to treat and prevent asthma, insomnia, flu, and more. | $115/$125 Certificate Elective

2 Saturdays, 11/7 & 11/14, 10 am–12 pm
Andrea Candee | Online | 212BOT346BO

2 Saturdays, 1/23 & 1/30, 10 am–12 pm
Amy Anthony | Online | 213BOT346CO

† The start time for all sections is as listed; end times vary. See website for the full schedule.
NATIVE FLORA IN AUTUMN
In autumn our native Northeast flora can be spectacular, but difficult to identify. With a 10X power hand lens and a plant key, you’ll learn to identify these wildflowers, shrubs, and trees on the Garden grounds. Blended class: online and on-site.

Prerequisite: Basic Plant ID or Plant Structure
$295/$325 Certificate Elective

5 Fridays, 9/25–10/23
(rain date: Saturday, 10/24), 9 am †
Nancy Slowik | NYBG & Online | 211BOT331BBL

NEW! ETHNOBOTANY: A PRACTITIONER’S PERSPECTIVE
NYBG Ethnobotanist Dr. Michael Balick has studied the relationship between plants and people for over 40 years. Explore the basics of ethnobotany, supplemented by stories and data gleaned from his own fieldwork. Discover how selected plant resources are used by traditional and postindustrial cultures today, as well as how plants have been used historically for healing and harm, foods and beverages, and their psychoactive effect.

$115/$125 Certificate Elective

3 Mondays, 10/19–11/2, 5:15–7 pm
Michael Balick, Ph.D. | Online | 212BOT344O

AUTUMN MUSHROOMS
In NYC, fall is the best time to hunt for edible fungi. Paul Sadowski, 25-year veteran of the NY Mycological Society, will lead a mushroom hunt, and show you how to identify many species and their look-alikes, where to find them, and how to cook or preserve them. Blended class: online and in the field.

Prerequisite: Basic Plant ID or Plant Structure
$145/$159 Certificate Elective

2 Wednesdays, 10/14 & 10/21, 10 am †
Paul Sadowski | Off-site & Online | 212BOT368BL

THE SCIENCE OF TREE COMMUNICATION
Discover how trees communicate via chemical signals in the air (to warn of insect attacks) and transfer nutrients to one another through complex underground fungal networks (sometimes to assist sick trees).

Prerequisite: Plant Structure
$125/$139 Certificate Elective

3 Tuesdays, 12/1–12/15, 6–8 pm
Steve Kutos | Online | 212BOT385AO

WINTER MUSHROOMS
While plants enjoy their winter’s sleep, many fungi are active in forests and parks. We’ll explore table favorites like Enoke and Oysters in class and in forays around the Garden. In class and in forays around the Garden, you’ll learn to recognize the winter characteristics of native and common woody plants by bud types, leaf scars, fruit remnants, and other distinguishing marks.

Prerequisite: Basic Plant ID or Plant Structure
$295/$325 Certificate Requirement

3 Sundays, 1/24–2/7, 10 am–12 pm
Giselle Herrera | Online | 213BOT385BO

FIVE PLANTS THAT CHANGED THE WORLD
Embark on a historical odyssey that uncovers the botany behind how yams, heterotrophic eukaryotic fungi, potatoes, and sugar cane played pivotal roles in human history—from helping to save the world from dire illness to sending humans into space to making modern contraception possible.

Prerequisite: Plant Structure
$75/$85 Certificate Elective

2 Wednesdays, 2/24 & 3/3, 10 am–12 pm
David Saidoff | Online | 213BOT207O

WHAT’S THIS TREE ON MY BLOCK
Learn to distinguish Manhattan’s five most common genera and pinpoint particular species in this fun intro to tree identification.

Prerequisite: Plant Structure
$559/$615 Certificate Requirement

Saturday, 11/14, 2–4 pm
James Kaechle | Online | 212BOT223AO

PLANT DIVERSITY
Explore the myriad structures and diverse life cycles of plants, algae, fungi, and bacteria. Discover how and why scientists have divided and classified these organisms.

Prerequisite: Plant Structure
$559/$615 Certificate Requirement

8 Mondays, 10/5–11/30, (no class 10/12) 5–8 pm
Cecilia Zumajo | Online | 212BOT317O

NATIVE FLORA IN WINTER
In class and in forays around the Garden, you’ll learn to recognize the winter characteristics of native and common woody plants by bud types, leaf scars, fruit remnants, and other distinguishing marks.

Prerequisite: Basic Plant ID or Plant Structure
$295/$325 Certificate Requirement

6 Fridays, 1/8–2/12, 11 am–1 pm
Nancy Slowik | NYBG & Online | 213BOT332BL

PLANT STRUCTURE
Get a solid grounding in the basic plant body—from the cell to the roots, stems, leaves, flowers, and fruit. We’ll use dissecting and compound light microscopes to observe plant anatomy, then introduce the base-level chemistry required to understand the world of plants.

Prerequisite: Plant Structure
$559/$615 Certificate Requirement

8 Tuesdays, 1/19–3/9, 6–9 pm
Jasmin Alim | Online | 213BOT315AO

PLANT PHYSIOLOGY
We will cover the role of plant hormones in growth and development, as well as plant movement, water transport through the plant body, and plant metabolism, including photosynthesis and respiration (anaerobic and aerobic).

Prerequisite: Plant Structure
$559/$615 Certificate Requirement

7 Mondays, 1/25–3/15 (no class 2/15), 5:30–8:30 pm
Jasmin Alim | Online | 213BOT316PO

† The start time for all sections is as listed; end times vary.
See website for the full schedule.
Crafts & DIY

WATERCOLOR BASICS
You love her recent New Yorker covers! Award-winning artist and seasoned educator Jenny Kroik is known for the loosely rendered, evocative scenes she describes as “very responsive—like a journal.” Using botanical subjects you have on hand, learn the basics of painting with watercolor or take your work to the next level in a casual environment. Have fun while experimenting with color and creativity! | $75/$85

Thursday, 10/15, 6:30–8:30 pm
Jenny Kroik I Online I 212CRF277AO

Sunday, 2/7, 12–2 pm
Jenny Kroik I Online I 213CRF277BO

NEW! T Turning F flowers I INTO I ART
Explore multiple ways to bring the beauty of dried flowers into your home. In the first session, you’ll discover tips on which flower types will last the longest, how to gather, press, and preserve them, and when to use which materials, such as glycerin and silica gel. Then, use the flowers you’ve dried to explore making art by painting the flowers to print with, hammering them onto watercolor paper for an embossed look, or pressing them directly on paper. | $85/$95

2 Saturdays, 10/24 & 11/7, 2–4 pm
Madeline Yanni I Online I 212CRF2370

BOTANICAL EMBROIDERY BASICS
Embroidery is tightly tied to human culture. The earliest known examples—intricately decorated clothes, boots, and hats found in Russia-date back to 30,000 BCE. NYC-based artist Jessica Maffia will teach you eight different stitches that you will use to create a botanically-inspired, small work of embroidery to hang in your home. This class is geared toward those with little to no experience embroidering. | $75/$85

Sunday, 11/1, 11:30 am–2:30 pm
Jessica Maffia I Online I 212CRF278AO

Sunday, 1/10, 11:30 am–2:30 pm
Jessica Maffia I Online I 213CRF278BO

NEW! HOLIDAY WREATHS
Learn to fashion different types and sizes of wreathes—from those that hang on the wall to those surrounding a candle to bring a soft glow to your holiday table. Calamia Crafts owner Madeline Yanni will demonstrate how to make an evergreen wreath from scratch, as well as how to create one using preserved greens such as cedar and juniper, dried seasonal botanicals, and mushroom birds. Demo only. | $25/$29

Monday, 11/9, 6–7 pm
Madeline Yanni I Online I 212CRF194AO

Wednesday, 12/2, 6–7 pm
Madeline Yanni I Online I 212CRF194BO

NEW! ALL ABOUT TERRARIUMS AND VIVARIUMS
Discover how to design your own terrarium or vivarium with Christopher Satch, plant scientist and award-winning exhibitor at the Philadelphia Flower Show. Through lecture and demonstration, he’ll discuss how to set up a simple, easy care terrarium, how to create an automated climate-controlled vivarium, and everything in between. | $45/$49

Saturday, 12/5, 10 am–12 pm
Christopher Satch I Online I 212CRF2750

NEW! INTERMEDIATE BOTANICAL EMBROIDERY
Take your basic stitching up a notch! NYC-based artist Jessica Maffia will teach you four ways to transfer a design to fabric, as well as seven basic stitches (lazy daisy, stem, back, French knot, straight, fern, and Rhodes) that you will use to embroider that design. This class is geared toward those with some experience embroidering. | $75/$85

Sunday, 12/13, 11:30 am–2:30 pm
Jessica Maffia I Online I 212CRF259AO

Sunday, 2/7, 11:30 am–2:30 pm
Jessica Maffia I Online I 213CRF259BO

NEW! INDOOR FERN GARDENS
Fresh from the release of her new book, The Complete Book of Ferns, Mobee Weinstein—NYBG’s Foreman of Gardeners for Outdoor Gardens—will show you how to choose the right species of ferns to group together into a lush, living arrangement. Become familiar with a wide variety of ferns— their cultural requirements and how big they’ll be—so you can choose the best ones to combine into your own miniature landscape. Design an indoor fern garden along with Mobee, or watch and learn! | $59/$65

Saturday, 1/23, 11 am–1 pm
Mobee Weinstein I Online I 213CRF2150

NEW! HOLIDAY WREATHS
Learn to fashion different types and sizes of wreathes—from those that hang on the wall to those surrounding a candle to bring a soft glow to your holiday table. Calamia Crafts owner Madeline Yanni will demonstrate how to make an evergreen wreath from scratch, as well as how to create one using preserved greens such as cedar and juniper, dried seasonal botanicals, and mushroom birds. Demo only. | $25/$29

Monday, 11/9, 6–7 pm
Madeline Yanni I Online I 212CRF194AO

Wednesday, 12/2, 6–7 pm
Madeline Yanni I Online I 212CRF194BO

NEW! ALL ABOUT TERRARIUMS AND VIVARIUMS
Discover how to design your own terrarium or vivarium with Christopher Satch, plant scientist and award-winning exhibitor at the Philadelphia Flower Show. Through lecture and demonstration, he’ll discuss how to set up a simple, easy care terrarium, how to create an automated climate-controlled vivarium, and everything in between. | $45/$49

Saturday, 12/5, 10 am–12 pm
Christopher Satch I Online I 212CRF2750

NEW! INTERMEDIATE BOTANICAL EMBROIDERY
Take your basic stitching up a notch! NYC-based artist Jessica Maffia will teach you four ways to transfer a design to fabric, as well as seven basic stitches (lazy daisy, stem, back, French knot, straight, fern, and Rhodes) that you will use to embroider that design. This class is geared toward those with some experience embroidering. | $75/$85

Sunday, 12/13, 11:30 am–2:30 pm
Jessica Maffia I Online I 212CRF259AO

Sunday, 2/7, 11:30 am–2:30 pm
Jessica Maffia I Online I 213CRF259BO

NEW! INDOOR FERN GARDENS
Fresh from the release of her new book, The Complete Book of Ferns, Mobee Weinstein—NYBG’s Foreman of Gardeners for Outdoor Gardens—will show you how to choose the right species of ferns to group together into a lush, living arrangement. Become familiar with a wide variety of ferns—their cultural requirements and how big they’ll be—so you can choose the best ones to combine into your own miniature landscape. Design an indoor fern garden along with Mobee, or watch and learn! | $59/$65

Saturday, 1/23, 11 am–1 pm
Mobee Weinstein I Online I 213CRF2150

NEW! HOLIDAY WREATHS
Learn to fashion different types and sizes of wreathes—from those that hang on the wall to those surrounding a candle to bring a soft glow to your holiday table. Calamia Crafts owner Madeline Yanni will demonstrate how to make an evergreen wreath from scratch, as well as how to create one using preserved greens such as cedar and juniper, dried seasonal botanicals, and mushroom birds. Demo only. | $25/$29

Monday, 11/9, 6–7 pm
Madeline Yanni I Online I 212CRF194AO

Wednesday, 12/2, 6–7 pm
Madeline Yanni I Online I 212CRF194BO

NEW! ALL ABOUT TERRARIUMS AND VIVARIUMS
Discover how to design your own terrarium or vivarium with Christopher Satch, plant scientist and award-winning exhibitor at the Philadelphia Flower Show. Through lecture and demonstration, he’ll discuss how to set up a simple, easy care terrarium, how to create an automated climate-controlled vivarium, and everything in between. | $45/$49

Saturday, 12/5, 10 am–12 pm
Christopher Satch I Online I 212CRF2750

NEW! INTERMEDIATE BOTANICAL EMBROIDERY
Take your basic stitching up a notch! NYC-based artist Jessica Maffia will teach you four ways to transfer a design to fabric, as well as seven basic stitches (lazy daisy, stem, back, French knot, straight, fern, and Rhodes) that you will use to embroider that design. This class is geared toward those with some experience embroidering. | $75/$85

Sunday, 12/13, 11:30 am–2:30 pm
Jessica Maffia I Online I 212CRF259AO

Sunday, 2/7, 11:30 am–2:30 pm
Jessica Maffia I Online I 213CRF259BO

NEW! INDOOR FERN GARDENS
Fresh from the release of her new book, The Complete Book of Ferns, Mobee Weinstein—NYBG’s Foreman of Gardeners for Outdoor Gardens—will show you how to choose the right species of ferns to group together into a lush, living arrangement. Become familiar with a wide variety of ferns—their cultural requirements and how big they’ll be—so you can choose the best ones to combine into your own miniature landscape. Design an indoor fern garden along with Mobee, or watch and learn! | $59/$65

Saturday, 1/23, 11 am–1 pm
Mobee Weinstein I Online I 213CRF2150
The New York Botanical Garden is home to New York City’s oldest and most prestigious Floral Design Program, and for over four decades has sent hundreds of graduates on to enjoy rewarding careers. Take an individual course for fun, or pursue a Certificate in Floral Design—either way, you’ll develop the mastery and confidence to express yourself through flowers.

THE CERTIFICATE PROGRAM

The NYBG Certificate is a nationally recognized mark of excellence in floral design that tells the world you have the talent and knowledge to interpret changing trends and provide creative design solutions. With comprehensive hands-on instruction from industry pros, you’ll create dozens of original floral designs for all occasions, gain a solid grounding in floral theory and history, and develop the contacts and business savvy you need to advance your career or manage your own business.

FOR ALL STUDENTS:

- Register early! With our new, expanded online offer, we often order and ship your flowers to you.
- Please see our website for a list of hard goods (containers, tools, etc.) you must purchase or have on hand before class.

Heirloom Blueberry Branch #1, *Vaccinium corymbosum*: Stanley, Watercolor on vellum, ©Connie Scanlon
CERTIFICATE REQUIREMENTS

Certificate students must complete 142 total course hours (116 required + 26 elective), plus an 80-hour internship. Students are also required to submit a portfolio showcasing photos of class assignments and their own unique creations. For a complete description of the program including internship and portfolio requirements, please visit our website.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Form</td>
<td>FDN 300</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Fundamentals of Style</td>
<td>FDN 304</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>Wedding Design I: Personals</td>
<td>FDN 304</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>Color Theory for Floral Design</td>
<td>FDN 306</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Flower ID from A to Z</td>
<td>FDN 308</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Interior Plantscapes</td>
<td>FDN 310</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Shopping the New York Flower Market**</td>
<td>FDN 400</td>
<td>4</td>
<td>—</td>
</tr>
<tr>
<td>Modern Sympathy Design**</td>
<td>FDN 382</td>
<td>6</td>
<td>—</td>
</tr>
<tr>
<td>Grand-Scale Arrangements</td>
<td>FDN 502</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Event Planning for the Floral Designer**</td>
<td>FDN 504</td>
<td>12</td>
<td>—</td>
</tr>
<tr>
<td>Elective courses</td>
<td></td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>TOTAL REQUIRED HOURS</td>
<td></td>
<td>142</td>
<td></td>
</tr>
</tbody>
</table>

ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prop Styling with Botanicals</td>
<td>FDN 312</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Modern Elegance: Hydrangeas</td>
<td>FDN 357</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Gothic Style: Dark and Dramatic</td>
<td>FDN 307</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Winter White Centerpiece &amp; Tablescape</td>
<td>FDN 320</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Thanksgiving Tabletop</td>
<td>FDN 390</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Compte Arrangement</td>
<td>FDN 349</td>
<td>4</td>
<td>13</td>
</tr>
</tbody>
</table>

**Courses offered in the Spring–Summer Catalog
P Courses with a prerequisite before you can register

QUESTIONS? CONTACT PROGRAM COORDINATOR THOMAS CAWLEY AT FDNCOORDINATOR@NYBG.ORG

FLOWER ARRANGING AT HOME

Bring cheer into your home and exercise your botanical creativity, with live, real-time direction. Watch your fellow students’ efforts online and get personal critiques from your instructor as you build your elegant arrangement with fresh flowers and veggies from your own garden, farmers market, or local grocery store. | $35/$45

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, 10/22, 11 am–1 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rose Edinger</td>
<td>Online</td>
<td>212FDN243AO</td>
<td></td>
</tr>
<tr>
<td>Tuesday, 11/17, 6–8 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nsombi Woodson</td>
<td>Online</td>
<td>212FDN243BO</td>
<td></td>
</tr>
<tr>
<td>Tuesday, 12/8, 11 am–1 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rose G. Edinger</td>
<td>Online</td>
<td>212FDN243CO</td>
<td></td>
</tr>
<tr>
<td>Tuesday, 1/19, 6–8 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nsombi Woodson</td>
<td>Online</td>
<td>213FDN243DO</td>
<td></td>
</tr>
<tr>
<td>Monday 2/22, 11 am–1 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rose G. Edinger</td>
<td>Online</td>
<td>213FDN243EO</td>
<td></td>
</tr>
<tr>
<td>Thursday, 3/18, 6–8 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nsombi Woodson</td>
<td>Online</td>
<td>213FDN243FO</td>
<td></td>
</tr>
</tbody>
</table>

DESIGNING WITH DAHLIAS

Take a page from trend-setting farm-to-table designers, and fashion a playful, free-flowing creation that showcases the exuberance of these late-summer blooms. $170 materials fee. | $85/$95 Certificate Elective

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, 9/22, 10 am–2 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nsombi Woodson</td>
<td>Online</td>
<td>211FDN398O</td>
<td></td>
</tr>
<tr>
<td>NEW! MODERN ELEGANCE: HYDRANGEAS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With charming natural palettes and impressive scale, hydrangeas are a garden favorite. With beautiful blossoms that are durable and easy to handle, they are a natural choice to bring inside for a show-stopping centerpiece. Learn what pairs well with these gorgeous blooms and create a lush arrangement that will look beautiful even after it dries. $150 materials fee | $59/$65 Certificate Elective

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday, 10/7, 10 am–12 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robin Zachary</td>
<td>Online</td>
<td>212FDN357O</td>
<td></td>
</tr>
</tbody>
</table>

PROP STYLING WITH BOTANICALS

Professional prop stylist Robin Zachary shares her insights on styling photos using botanicals. She’ll demonstrate how to curate a variety of tabletop settings, including modern, vintage, and rustic photos using botanicals. $59/$65 Certificate Elective

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday, 10/24, 11 am–1 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robin Zachary</td>
<td>Online</td>
<td>212FDN312AO</td>
<td></td>
</tr>
<tr>
<td>Saturday, 2/27, 11 am–1 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robin Zachary</td>
<td>Online</td>
<td>213FDN312BO</td>
<td></td>
</tr>
</tbody>
</table>

COMPOTE ARRANGEMENT

Learn the techniques and secrets for creating chic, vintage-inspired arrangements in a trendy footed container. Walk through the step-by-step process and craft your lush, romantic centerpiece. $150 materials fee. $85/$95 Certificate Elective

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, 12/3, 10:30 am–3 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nsombi Woodson</td>
<td>Online</td>
<td>212FDN349O</td>
<td></td>
</tr>
</tbody>
</table>
### Online Seasonal Workshops

**GOTHIC STYLE: DARK AND DRAMATIC**
Channel windswept moors and foreboding castles and covens as you design a haunting floral design in utilizing dramatic and beautiful seasonal materials. You’ll combine inky toned blooms with twisted branches and seed pods to create witchy, wild arrangements for your entranceways, dining tables, or mantels. $170 materials fee.  

**FUNDAMENTALS OF FORM**
Learn the basics of successful floral design and master the mechanics needed for round, triangular, parallel, and crescent arrangements. Experiment with shape, line, and symmetry while composing beautiful, balanced creations. $275 materials fee.  

**FUNDAMENTALS OF STYLE**
The ability to command a broad vocabulary of styles defines the professional floral designer. From Neo-Classical and Victorian to English garden and Flemish, understanding floral styles expands your design options, evokes specific moods, and helps create the perfect setting. $275 materials fee.  

**GRAND-SCALE ARRANGEMENTS**
These dramatic arrangements are designed and in demand. Learn the mechanics behind how halls, ballrooms, parties, and hotels are always full, lavish arrangements to enhance entranceways, dining tables, or mantels. $195/$215 materials fee.  

**FLOWER ID FROM A TO Z**
Learn to identify new floral varieties of old favorites, seasonal flowers, and various foliages. Topics include special handling requirements of many flower types. $195/$215 materials fee.  

**COLOR THEORY FOR FLORAL DESIGN**
Colors—like flowers themselves—evoke feelings and set the mood. Explore the role of color in floral design across a spectrum of flowers. This course gives you a solid grounding in color theory, while highlighting popular hues and color combinations. $180 materials fee.  

**INTERIOR PLANTSCAPES**
Florists and designers who want long-lasting, gorgeous interior plantings won’t want to miss this unique class highlighting essential horticulture practices for selecting and maintaining plants for atria, corporate offices, and special events. Trimming, pruning, soil testing, pest prevention, cleaning, and more are covered. $195/$215 materials fee.  

---

**Thanksgiving Tabletop**
Create a glorious autumn centerpiece for your Thanksgiving table, crafted from store-bought seasonal flowers and herbs—-including roses, Chinese lanterns, celosia, chrysanthemums, mini pumpkins, and lady apples. Set your plant materials in a cluster of repurposed containers and vases for a personalized holiday presentation. Learn tips to showcase an eclectic tabletop of flowers, textures, tableware, props, and linens that complete the harvest ambience. $75/$85 Certificate Elective

**WINTER WHITE CENTERPIECE & TABLESCAPE**
Create a Dutch Masters still-life inspired centerpiece crafted from store-bought seasonal flowers and herbs, including roses, calla lilies, ranunculus, hydrangeas, rosemary, berries, pine, and eucalyptus stems. We will repurpose a favorite container or vase for a personalized holiday presentation. Our wintry tablescape will showcase bouquets of flowers, botanical materials, and fresh herbs, along with the latest in napkin and candle decoration invoking warm yuletide cheer. $75/$85 Certificate Elective

---

**Wedding Design I: Personals**
Flowers are crucial for a memorable wedding. Learn the art of successful floral wedding design, including fine wiring and taping to create corsages and boutonnieres with fresh flowers, ribbons, and bows. Advance to styling and assembling bridal and bridesmaid bouquets. $250 materials fee.  

**Wedding Design II: Personals**
Learn the art of successful floral wedding design, including wire wrapping and taping to create corsages and boutonnieres with fresh flowers, ribbons, and bows. Advance to styling and assembling bridal and bridesmaid bouquets. $250 materials fee.  

---

**Instructor Bios Can Be Found Online At NYBG.ORG/ADULTED**

---

**Certificate Classes**
Open To Non-Certificate Students

**Fundamentals of Form**
Learn the basics of successful floral design and master the mechanics needed for round, triangular, parallel, and crescent arrangements. Experiment with shape, line, and symmetry while composing beautiful, balanced creations. $275 materials fee.  

**Fundamentals of Style**
The ability to command a broad vocabulary of styles defines the professional floral designer. From Neo-Classical and Victorian to English garden and Flemish, understanding floral styles expands your design options, evokes specific moods, and helps create the perfect setting. $275 materials fee.  

**Gothic Style: Dark and Dramatic**
Channel windswept moors and foreboding castles and covens as you design a haunting floral design in utilizing dramatic and beautiful seasonal materials. You’ll combine inky toned blooms with twisted branches and seed pods to create witchy, wild arrangements for your entranceways, dining tables, or mantels. $170 materials fee.  

**Thanksgiving Tabletop**
Create a glorious autumn centerpiece for your Thanksgiving table, crafted from store-bought seasonal flowers and herbs—-including roses, Chinese lanterns, celosia, chrysanthemums, mini pumpkins, and lady apples. Set your plant materials in a cluster of repurposed containers and vases for a personalized holiday presentation. Learn tips to showcase an eclectic tabletop of flowers, textures, tableware, props, and linens that complete the harvest ambience. $75/$85 Certificate Elective

**Winter White Centerpiece & Tablescape**
Create a Dutch Masters still-life inspired centerpiece crafted from store-bought seasonal flowers and herbs, including roses, calla lilies, ranunculus, hydrangeas, rosemary, berries, pine, and eucalyptus stems. We will repurpose a favorite container or vase for a personalized holiday presentation. Our wintry tablescape will showcase bouquets of flowers, botanical materials, and fresh herbs, along with the latest in napkin and candle decoration invoking warm yuletide cheer. $75/$85 Certificate Elective

---

**Instructor Bios Can Be Found Online At NYBG.ORG/ADULTED**
ADULT EDUCATION  FOOD & DRINK

NEW!  FALL EDIBLE PLANTS
Take a guided ramble with wild foods author and forager Marie Viljoen and learn how to identify and use the edible plants that are indigenous to the Northeast. Visit NYBG’s Native Plant Garden and the Thain Family Forest and discover what these plants look like in fall, a skill that is key to successful foraging in each season. Outside only; rain or shine.  |  $59/$65
Thursday, 10/15, 11 am–1 pm
Marie Viljoen | NYBG | 212CKG229

FERMENTING VEGETABLES
Fermentation is one of the oldest food processing methods still used today. Discover the basic science behind how to ferment vegetables—from sauerkraut and beets to carrots and corn. Fermentation expert Cheryl Paswater will demonstrate best practices for fermenting vegetables while we discuss the many health benefits fermented foods can provide.  |  $45/$49
Monday, 10/26, 6:30–8 pm
Cheryl Paswater | Online | 212CKG241O

NEW!  HOLIDAY PRESERVES
Ring in the holiday season with decadent winter fruit preserves. Learn how to make brandied fruit, spiced apple compote, and almond pears in amaretto syrup from Cornell-trained master food preserver Stephen Nocera. He will demonstrate how to properly preserve fruit, make these delectable delights, and share recipes that will add pizzazz to your holiday table or be the favorite homemade gift for your foodie friends and family!  |  $45/$49
Sunday 11/15, 11 am–1 pm
Stephen Nocera | Online | 212CKG218O

NEW!  BOTANICAL MIXOLOGY FOR THE HOLIDAYS
Go beyond the garnish to explore the world of oleo-saccharums, infusions, simple syrups, and tinctures using plants and ingredients accessible to the urban gardener/drinker. You’ll learn history and receive growing advice, as well as recipes. Jim will demonstrate how to make your own tincture to perk up your holiday cocktails!  |  $45/$49
Friday, 11/20, 6–7:30 pm
Jim Freeman | Online | 212CKG243O

THE KITCHEN MYCOLOGIST
You’ll be a better mushroom cook after learning basic mycology (the study of fungi) through the lens of your kitchen. This illustrated talk explores the intersection of mycology and the selection, storage, preparation, and nutritional value of mushrooms; the way fungi spoils foods and improves foods; the biologic reason why mushrooms taste differently and why some are more expensive than others; and the impact of endophytic fungi and mycorrhizal networks on food crops.  |  $45/$49
Tuesday, 12/1, 6–8 pm
Eugenia Bone | Online | 212CKG230O

PRESERVING CITRUS: MARMALADES & CURD
Early winter is when citrus is at its juiciest. Learn how to preserve these fruits and savor their tangy flavor throughout the year. Cornell-trained master food preserver Stephen Nocera will demonstrate the proper balance of sweet and tart while making a Meyer lemon curd, a pectin-free tangerine marmalade, and Moroccan-style preserved lemons.  |  $45/$49
Sunday, 1/24, 11 am–1 pm
Stephen Nocera | Online | 213CKG249O

MAKING KOMBUCHA
Fermentation—known as zymology—refers to the conversion of carbohydrates into alcohols, carbon dioxide, yeast, or bacteria. Discover the basic science of how to ferment tea in order to make kombucha, as well as how it can improve your gut health. You’ll learn different ways to brew teas, receive a variety of kombucha recipes, sources for acquiring starter culture, and best practices for feeding it.  |  $45/$49
Monday, 2/22, 6:30–8:00 pm
Cheryl Paswater | Online | 213CKG201O

NEW!  FORAGING IN WINTER
When the trees have dropped their leaves and there is a chill in the air, there are still many things to see in the woods and wide-open spaces. Join wild foods author and forager Marie Viljoen for a brisk walk in the Garden to discover and identify edible, fragrant, and useful plants, such as juniper, spicebush, and bayberry in their winter camouflage. Outside only; snow or shine.  |  $59/$65
Thursday, 1/21, 11 am–1 pm
Marie Viljoen | NYBG | 213CKG247

Tohono O’odham I’itoi Onion, Allium cepa L. (detail), Watercolor on paper, ©Gillian Rice
Now more than ever, people are realizing the physical, social, and psychological benefits of home and community gardening. Whether you are pursuing a Certificate or just looking for a fun class, NYBG is a great place to increase your gardening knowledge and improve your skills. Taught by top professionals, each course provides cutting-edge information on ecologically responsible garden care and design, including plant use, soil husbandry, composting, and pest control. Lectures are supported by hands-on study on the Garden’s historic grounds.

THE CERTIFICATE PROGRAM

Upon completion of the NYBG Gardening Certificate Program, students will:

• Create beautiful and ecologically sound gardens that combine trees, shrubs, perennials, annuals, and bulbs.
• Be proficient in identifying, selecting, cultivating, and caring for trees and shrubs, vegetables, flowers, and fruit.
• Have the confidence to grow and maintain home, terrace, or community gardens.
• Understand the essential concepts of sustainable gardening practices for trees, shrubs, lawns, perennials, and vegetables.
CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Gardening</td>
<td>GAR 301</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Introduction to Plant Science</td>
<td>HRT 300</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>Soil Science for Gardeners</td>
<td>GAR 302</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Gardening with Native Plants**</td>
<td>GAR 315</td>
<td>9</td>
<td>—</td>
</tr>
<tr>
<td>Insect Identification and Management</td>
<td>GAR 320</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Disease Identification and Management</td>
<td>GAR 324</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Fundamentals of Garden Design</td>
<td>GAR 342</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Vegetable Gardening</td>
<td>GAR 431</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Complete Garden Care and Maintenance</td>
<td>GAR 440</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Pruning Principles and Practices</td>
<td>HRT 321</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Plants for Landscaping</td>
<td>HRT 358</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>Plant Propagation I: Basic Principles</td>
<td>HRT 411</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Elective GAR or HRT courses</strong></td>
<td></td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL REQUIRED HOURS: 187

ELECTIVES

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Gardening Basics</td>
<td>GAR 308</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Garden Design Workshop</td>
<td>GAR 317</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Container Gardening</td>
<td>GAR 327</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>A Four-Season Native Garden</td>
<td>GAR 369</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Botanical Latin</td>
<td>GAR 360</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Rooftop Gardening</td>
<td>GAR 328</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

**Courses offered in the Spring—Summer Catalog

P Courses with a prerequisite before you can register

For professional organizations, see p. 35.

QUESTIONS? CONTACT PROGRAM COORDINATOR
DARYL BEYERS AT GARCOORDINATOR@NYBG.ORG

BASIC LANDSCAPE DESIGN FOR GARDENERS

INTRO TO LANDSCAPE DESIGN
Gain an introduction to the terminology, concepts, and basic principles of landscape design through lectures and simple two-dimensional exercises. $185/$205

See p. 29 for full list of dates and times.

CONTAINER GARDENING
Learn how to create a container garden for your patio, terrace, or entryway that’s both functional and gorgeous—and helps your plants thrive in all four seasons. | $229/$249 Certificate Elective

4 Thursdays, 10/22–11/12, 10 am–12 pm
Renee Marsh | Online | 212GAR327O

A GARDEN DESIGN PRIMER
Put all your garden ideas into practice with this practical overview of the best layout plans and circulation patterns. Learn how to analyze space and proportions to create a coherent landscape design that complements both home and garden. | $39/$45

Wednesday, 11/4, 6–8 pm
Daryl Beyers | Online | 212GAR222CO

Sunday, 1/10, 10 am–12 pm
Daryl Beyers | Online | 213GAR222BO

GARDEN DESIGN WORKSHOP
Learn the basics, review examples that work for different architectural styles and site conditions, and develop a go-to plant list for your home landscape. In the second session, you will develop and draw a basic design plan for your garden that you can refine and implement come spring. | $225/$249 Certificate Elective

3 Sundays, 10/18–11/1, 10 am–12:40 pm
Daryl Beyers | Online | 212GAR317AO

3 Sundays, 1/31–2/21 (no class 2/14), 10 am–12:40 pm
Daryl Beyers | Online | 213GAR317BO

PERENNIAL PLANT COMBINATIONS
Whether in a shady corner or a sunny border, selecting the right plant combinations can turn a ho-hum garden into one that gets rave reviews. Concentrating on perennials, learn to combine color, texture, height, and bloom to create a harmonious garden come spring. | $79/$85

2 Saturdays, 10/17 & 10/24, 10:30 am–12:30 pm
Sheri Forster | Online | 212GAR173DO

2 Wednesdays, 1/27 & 2/3, 10:30 am–12:30 pm
Sheri Forster | Online | 213GAR173AO

2 Tuesdays, 2/9 & 2/16, 10:30 am–12:30 pm
Sheri Forster | Online | 213GAR173BO

2 Wednesdays, 2/24 & 3/3, 10:30 am–12:30 pm
Sheri Forster | Online | 213GAR173CO
OUTDOOR PLANTS

ROOFTOP GARDENING
Rooftop, terrace, and balcony spaces have their own unique challenges for soil maintenance, watering, crop management, installation, and more. Manager of NYBG’s Edible Academy Annie Novak, cofounder of America’s first fully landscaped green roof commercial vegetable farm, and author of the 2016 bestseller *The Rooftop Growing Guide*, shows you how to make your rooftop garden thrive. From vegetable selection to pest control to composting, you’ll learn the basics of rooftop, terrace, and balcony growing, covering both container and green roof garden systems. $115/$125 Certificate Elective
3 Tuesdays, 10/6–10/20, 6:15–8:15 pm
Annie Novak | Online | 212GAR328O

A FOUR-SEASON NATIVE GARDEN
With a little planning, your garden can look beautiful, even after the flowers fade. Instructor Kim Eierman will introduce you to native plants that extend the color show and textural interest in your garden through fall and winter, with beautiful foliage, striking structure, colorful branches, berries, and seed pods. $85/$95 Certificate Elective
2 Saturdays, 10/17 & 10/24, 10 am–12 pm
Kim Eierman | Online | 212GAR369O

VERSATILE VIBURNUMS
Viburnums have skyrocketed in popularity for good reason! They offer unparalleled beauty and fragrance, adaptability and pest resistance, landscape diversity, food for birds and pollinators, and much more. Learn how to choose and care for the many available native and exotic species and cultivars that can thrive in your garden. $59/$65
2 Saturdays, 10/31 & 11/7 10:30 am–12 pm
Vincent Simeone | Online | 212GAR156O

NEW! INTRODUCTION TO BULBS
Since autumn is the optimum season to plant bulbs, now is the time to decide what will work best in your garden. In this class, you’ll receive an overview of bulbs—what they are and how to properly plant them. Common problems and solutions for a successful growing season will also be covered. $55/$59
2 Tuesdays, 11/10 & 11/17, 5–6:30 pm
Michael Hagen | Online | 212GAR287BO

CUT FLOWER FARMING
Discover how to design, plant, grow, and harvest a cutting garden that will be productive throughout the year. You’ll practice starting seeds to ensure you always have something fresh to cut. We’ll also cover traditional and unexpected annuals that thrive locally. $169/$185
3 Thursdays, 2/11–2/25, 6:15–8:15 pm
Anne Marie Breyer | Online | 213HRT142BO

GARDEN MAINTENANCE

PUT YOUR GARDEN TO BED
What can you do this fall for your best garden ever next spring? Learn techniques to improve soil quality, protect perennials and tender plants through the winter, eliminate potential sites for insects and diseases, and manage all those fallen leaves. $45/$49
Sunday, 10/4, 10 am–12 pm
Leda Meredith | Online | 212GAR185AO
Friday, 10/23, 10 am–12 pm
Leda Meredith | Online | 212GAR185BO

PRUNING: HOW, WHEN, AND WHERE
This two-day course covers proper pruning techniques for maintaining shrubs, evergreens, hedges and trees. Recommended tool choices and their maintenance will be discussed. Shrub pruning demonstration included. $75/$85
2 Saturdays, 10/31 & 11/7, 10 am–12 pm
Ann Perkowski | Online | 212GAR236AO
2 Saturdays, 2/27 & 3/6, 10 am–12 pm
Ann Perkowski | Online | 213GAR236BO

ORGANIC GARDENING BASICS
Explore the organic method—its philosophy and history, biological principles, and practical techniques. This course will cover how to build and maintain soil health, encourage biodiversity, use water and energy responsibly, and avoid chemicals. The focus is on how to restore, maintain, and enhance ecological harmony in your garden—from ornamentals to vegetables to lawns. $229/$255 Certificate Elective
4 Fridays, 10/30–11/20, 10 am–12 pm
Renee Marsh | Online | 212GAR308O
INDOOR PLANTS

LIVING WILD WITH HILTON CARTER
Author, artist, and plant stylist, Hilton Carter is an advocate for seeing plants as living beings worthy of your passion, time, and attention. His own home is filled with more than 200 of them. In this talk he’ll take us on a tour of his Baltimore home, sharing the best plants for particular rooms, his top 10 favorites right now, and how to care for them. Along the way you'll get inspiration on how to use plants to create an oasis of calm in your own home.

Hilton Carter’s work has been featured in The New York Times, Wall Street Journal, HGTV, and BuzzFeed among others. His popular 2019 book, Wild at Home, was followed up this year with Wild Interiors: Beautiful Plants in Beautiful Spaces. | $15/$18
Wednesday, November 11, 7–8 pm Online | 212GAR825O

FRAGRANT INDOOR GARDEN
When winter winds blow cold, bring nature inside with houseplants that provide fragrance and color year round. Learn the full range of indoor plants with scented flowers and foliage: citrus, Jasmines, Hoyas, passionflowers, geraniums, orchids, herbs, bulbs, and more! Learn to select the right plant for each growing space and discover how to pot, water, and fertilize scented plants. | $55/$59
Saturday, 2/27, 10 am–12 pm Jim Freeman | Online | 213GAR223O

NEW! PLANT PROPAGATION FOR THE HOME GARDENER
Discover how to reproduce the plants you love! Have your favorite plants ready for this interactive online session, where you’ll learn the best ways to create cuttings and make divisions for propagating different species. We’ll show you what rooting material to use, and how to care for your new plants as they grow. | $55/$59
Tuesday, 2/9, 6–8 pm Nick Gershberg | Online | 213GAR288O

CERTIFICATE CLASSES
Open to Non-Certificate students

BOTANICAL LATIN
Review the rules of taxonomy, Latin grammar, and pronunciation, and learn the history of the binomial system in use today. | $255/$279 Certificate Elective
5 Thursdays, 10/22–11/19, 6:15–8:15 pm Jennifer Bakshi | Online | 212GAR360BO
5 Thursdays, 1/7–2/4, 10:30 am–12:30 pm Jennifer Bakshi | Online | 213GAR360CO
5 Mondays, 3/8–4/5, 6:15–8:15 pm Jennifer Bakshi | Online | 213GAR360DO

FUNDAMENTALS OF GARDENING
This course is also required for the Horticultural Therapy Certificate.
Explore the basics of successful, environmentally friendly gardening. Topics include soils and their improvement, seed sowing, vegetative propagation, planting, pruning, watering, weeding, mulching, and disease and pest control. | $295/$325 Certificate Requirement
6 Saturdays, 11/7–12/19, 12–2 pm Jennifer Cappello-Ruggiero | Online | 212GAR301BO
6 Wednesdays, 1/6–2/10, 6–8 pm Daryl Beyers | Online | 213GAR301CO
6 Fridays, 1/29–3/5, 10 am–12 pm Renee Marsh | Online | 213GAR301DO

FUNDAMENTALS OF GARDEN DESIGN
This class introduces basic garden design principles using the interplay of structural features, plant characteristics, and site assessment. Learn to creatively combine trees, shrubs, perennials, annuals, and bulbs based on color, shape, texture, and size. Blended class: online and on-site. | $285/$315 Certificate Requirement
5 Tuesdays, 10/14–12/2, (no class 11/25) 6:15–8:15 pm Nick Storrs | Online | 212GAR431AO
6 Wednesdays, 2/3–3/10, 6:15–8:15 pm Nick Storrs | Online | 213GAR431BO

VEGETABLE GARDENING
Examine pre-planting procedures, from soil preparation to crop rotation planning. Study the timing and techniques of planting, pest management, and harvest and post-harvest handling. Survey heirloom varieties, new cultivars, and classic selections. | Prerequisite: Fundamentals of Gardening | $265/$289 Certificate Requirement
5 Wednesdays, 10/14–12/2, (no class 11/11 or 11/25) 6:15–8:15 pm Nick Storrs | Online | 212GAR431AO
6 Wednesdays, 2/3–3/10, 6:15–8:15 pm Nick Storrs | Online | 213GAR431BO

INSECT IDENTIFICATION AND MANAGEMENT
Pest identification is key to maintaining a healthy garden. Identify which common insects are pests and which are beneficial. Learn the most common orders of insects and the damage they can cause, as well as simple, non-toxic methods of preventing major infestations. Please bring samples of insects and damaged plants to class. Blended class: online and on-site. | $285/$319 Certificate Requirement
4 Sundays, 11/1–12/6 (no class 11/8 or 11/29), 11 am † Mark Kokinchak | NYBG & Online | 212GAR320BL

SOIL SCIENCE FOR GARDENERS
Understand how soil qualities affect overall plant productivity and make sustainable gardening possible. Topics include soil formation and physical properties; soil-water relationships; irrigation, drainage, and fertilization techniques; and basic soil sampling, pH, and nutrient testing. Note: this is not the same as Soil Science | $285/$315 Certificate Requirement
6 Tuesdays, 1/7–2/16, 10 am–12 pm Manny Grossman | Online | 213GAR302O

DISEASE IDENTIFICATION AND MANAGEMENT
It’s essential to identify plant diseases before they become widespread in your garden. Explore the basics of disease management, and learn how the principles of Integrated Pest Management (IPM) can help you maintain a strong and healthy garden. | $285/$319 Certificate Requirement
6 Wednesdays, 1/13–2/17, 6:15–8:15 pm Mark Kokinchak | Online | 213GAR324O

† The start time for all sections is as listed; end times vary. See website for the full schedule.
All About Containers Saturdays
Saturdays, October 17, 24, & 31
9:30–11:30 am

CONTAINER GARDENING 101
Learn the basics for planting and maintaining a healthy outdoor container garden: materials and container styles, potting mixes, fertilization, and watering.

October 17 | Daryl Beyers | 212GAR200BO

THE VERY BEST PLANTS FOR POTS
Containers are an unnatural habitat, with fertilizer, water and root restrictions that suit some plants better than others. Find out which plants to avoid, which ones work well, and which ones really thrive.

October 24 | Renee Marsh | 212GAR200CO

NEW! GREAT NATIVE PLANTS FOR CONTAINERS
Learn which native plants are the best choices to use successfully in containers. Even if you don’t have room for a perennial garden, you can still invite nature into your yard, patio, or balcony with some great native plants in containers. The butterflies, beneficial insects, hummingbirds, and pollinators will thank you.

October 31 | Kim Eierman | 212GAR200DO

Registration fee for each section: $39/$45
All Three Sections: $99/$109 | 212GAR200AO

NEW! Native Plant Sundays
Sundays, November 8, 15 & 22
9:30–11:30 am

NATIVE PLANT SELECTION
Discover what makes a plant native, how to find and select the best species for your garden, and how to support and encourage pollinators in your own landscape.

November 8 | Kim Eierman | 212GAR202BO

DESIGNING WITH NATIVE PLANTS
Explore how to successfully incorporate native plants into your plans for sustainable garden designs filled with the beauty and diversity you desire.

November 15 | Renee Marsh | 212GAR202CO

PROPAGATING NATIVE PLANTS
Learn how to collect and sow the seeds of native plants from your local landscape or from commercial sources, and how to propagate plants from your own collection through techniques such as division, cuttings, and layering.

November 22 | Nick Gershberg | 212GAR202DO

Registration fee for each section: $39/$45
All Three Sections: $99/$109 | 212GAR202AO

Apartment Gardener’s Saturdays
Saturdays, November 7, 14, & 21
9:30–11:30 am

CREATING AN INDOOR GARDEN
Select the right plants, based on light, temperature, and aesthetics. Discover unusual plants, and tools and techniques to keep indoor plants healthy.

November 7 | Chris Raimondi, CLP | 212GAR299BO

SUCCCEED WITH LOW-LIGHT PLANTS
Many new and unusual plants can thrive in light-deprived corners. Choose the right plants for your space, and develop fertilization, water management, and pest control techniques for these shade-loving species.

November 14 | Daryl Beyers | 212GAR299CO

GROWING HERBS INDOORS
Whether you’re bringing outdoor herbs inside, or starting a kitchen herb garden from scratch, this class covers the essentials—from managing indoor conditions to harvesting and storing herbs for maximum flavor and fragrance.

November 21 | Nick Storrs | 212GAR299DO

Registration fee for each section: $39/$45
All Three Sections: $99/$109 | 212GAR299AO

Online Weekend Gardening Workshops

NEW! Native Plant Sundays
Sundays, November 8, 15 & 22
9:30–11:30 am

全国春季园艺工作坊

SPRING GARDENERS TASK LIST
Spring cleaning gives your garden a head start on a great growing season. Review a spring maintenance checklist, from raking off winter mulch to spotting signs of winter injury and noting where gaps in the garden can be filled.

February 20 | Daryl Beyers | 213GAR225BO

SOIL BASICS: GET IT RIGHT!
Rich, nutritious soil makes for large, healthy plants and reduces the need for regular fertilization. Learn the difference between soil structure and texture; how these differences affect plant growth; and how to modify and improve your soil. Give your garden a solid foundation, and you’ll reap the benefits for years to come.

February 27 | Manny Grossman | 213GAR225CO

PRUNING: SHAPE-UP FOR SPRING
Are you intimidated by pruning? March is a great time to thin out overgrown woody plants to create open, healthy, beautiful trees and shrubs. Learn how and when and why to prune, the tools for the job, and the difference between maintenance and rejuvenation pruning.

March 6 | Michael Ruggiero | 213GAR225DO

Registration fee for each section: $39/$45
All Three Sections: $99/$109 | 213GAR225AO

Wake Up Your Garden! Saturdays
Saturdays, October 17, 24, & 31
9:30–11:30 am

全国春季园艺工作坊

SPRING GARDENERS TASK LIST
Spring cleaning gives your garden a head start on a great growing season. Review a spring maintenance checklist, from raking off winter mulch to spotting signs of winter injury and noting where gaps in the garden can be filled.

February 20 | Daryl Beyers | 213GAR225BO

SOIL BASICS: GET IT RIGHT!
Rich, nutritious soil makes for large, healthy plants and reduces the need for regular fertilization. Learn the difference between soil structure and texture; how these differences affect plant growth; and how to modify and improve your soil. Give your garden a solid foundation, and you’ll reap the benefits for years to come.

February 27 | Manny Grossman | 213GAR225CO

PRUNING: SHAPE-UP FOR SPRING
Are you intimidated by pruning? March is a great time to thin out overgrown woody plants to create open, healthy, beautiful trees and shrubs. Learn how and when and why to prune, the tools for the job, and the difference between maintenance and rejuvenation pruning.

March 6 | Michael Ruggiero | 213GAR225DO

Registration fee for each section: $39/$45
All Three Sections: $99/$109 | 213GAR225AO

全国春季园艺工作坊

SPRING GARDENERS TASK LIST
Spring cleaning gives your garden a head start on a great growing season. Review a spring maintenance checklist, from raking off winter mulch to spotting signs of winter injury and noting where gaps in the garden can be filled.

February 20 | Daryl Beyers | 213GAR225BO

SOIL BASICS: GET IT RIGHT!
Rich, nutritious soil makes for large, healthy plants and reduces the need for regular fertilization. Learn the difference between soil structure and texture; how these differences affect plant growth; and how to modify and improve your soil. Give your garden a solid foundation, and you’ll reap the benefits for years to come.

February 27 | Manny Grossman | 213GAR225CO

PRUNING: SHAPE-UP FOR SPRING
Are you intimidated by pruning? March is a great time to thin out overgrown woody plants to create open, healthy, beautiful trees and shrubs. Learn how and when and why to prune, the tools for the job, and the difference between maintenance and rejuvenation pruning.

March 6 | Michael Ruggiero | 213GAR225DO

Registration fee for each section: $39/$45
All Three Sections: $99/$109 | 213GAR225AO

全国春季园艺工作坊

SPRING GARDENERS TASK LIST
Spring cleaning gives your garden a head start on a great growing season. Review a spring maintenance checklist, from raking off winter mulch to spotting signs of winter injury and noting where gaps in the garden can be filled.

February 20 | Daryl Beyers | 213GAR225BO

SOIL BASICS: GET IT RIGHT!
Rich, nutritious soil makes for large, healthy plants and reduces the need for regular fertilization. Learn the difference between soil structure and texture; how these differences affect plant growth; and how to modify and improve your soil. Give your garden a solid foundation, and you’ll reap the benefits for years to come.

February 27 | Manny Grossman | 213GAR225CO

PRUNING: SHAPE-UP FOR SPRING
Are you intimidated by pruning? March is a great time to thin out overgrown woody plants to create open, healthy, beautiful trees and shrubs. Learn how and when and why to prune, the tools for the job, and the difference between maintenance and rejuvenation pruning.

March 6 | Michael Ruggiero | 213GAR225DO

Registration fee for each section: $39/$45
All Three Sections: $99/$109 | 213GAR225AO

全国春季园艺工作坊

SPRING GARDENERS TASK LIST
Spring cleaning gives your garden a head start on a great growing season. Review a spring maintenance checklist, from raking off winter mulch to spotting signs of winter injury and noting where gaps in the garden can be filled.

February 20 | Daryl Beyers | 213GAR225BO

SOIL BASICS: GET IT RIGHT!
Rich, nutritious soil makes for large, healthy plants and reduces the need for regular fertilization. Learn the difference between soil structure and texture; how these differences affect plant growth; and how to modify and improve your soil. Give your garden a solid foundation, and you’ll reap the benefits for years to come.

February 27 | Manny Grossman | 213GAR225CO

PRUNING: SHAPE-UP FOR SPRING
Are you intimidated by pruning? March is a great time to thin out overgrown woody plants to create open, healthy, beautiful trees and shrubs. Learn how and when and why to prune, the tools for the job, and the difference between maintenance and rejuvenation pruning.

March 6 | Michael Ruggiero | 213GAR225DO

Registration fee for each section: $39/$45
All Three Sections: $99/$109 | 213GAR225AO
Horticulture

Develop the vital skills needed to protect and manage sustainable landscapes, maintain healthy trees, design attractive gardens, and produce landscape plants. Enroll in a single class or pursue a Horticulture Certificate.

THE CERTIFICATE PROGRAM

Increasing concerns for environmental quality, conservation, and restoration are driving jobs nationwide at landscaping companies, nurseries and garden centers, public parks, botanical gardens, and private estates. The NYBG Horticulture Certificate is a NY State licensed credential that helps professionals enhance their profiles, and individuals pursue new green careers. Taught by landscape and horticulture experts, the unique program blends classroom theory with field studies in the Garden’s historic landscape, offering a high standard of training in four areas of concentration: Plant Production, Sustainable Landscape Management, Arboriculture, and Sustainable Garden Design.

- Seedheads of *Raphia taedigera* (detail), Watercolor on paper, ©Barbara Oozeerally
## CERTIFICATE REQUIREMENTS

**Plant Production**  TRACK 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to Plant Science</strong></td>
<td>HRT 300</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td><strong>Soil Science I: Physical Properties</strong></td>
<td>HRT 301</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Soil Science II: Chemistry and Nutrition</strong></td>
<td>HRT 302</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Horticultural Techniques: Greenhouse Practices</strong></td>
<td>HRT 312</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td><strong>Insect Pests of Landscape Plants</strong></td>
<td>HRT 381</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Plant Propagation I: Basic Principles</strong></td>
<td>HRT 411</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Plant Propagation II: Applications</strong></td>
<td>HRT 412</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td><strong>Disease Identification &amp; Management</strong></td>
<td>HRT 481</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Nursery and Greenhouse Management</strong></td>
<td>HRT 491</td>
<td>24</td>
<td>—</td>
</tr>
<tr>
<td><strong>TOTAL REQUIRED HOURS</strong></td>
<td></td>
<td>158</td>
<td></td>
</tr>
</tbody>
</table>

**Sustainable Landscape Management**  TRACK 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to Plant Science</strong></td>
<td>HRT 300</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td><strong>Soil Science I: Physical Properties</strong></td>
<td>HRT 301</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Soil Science II: Chemistry and Nutrition</strong></td>
<td>HRT 302</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Horticultural Techniques: Landscape Gardening</strong></td>
<td>HRT 311</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Pruning Principles and Practices</strong></td>
<td>HRT 321</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td><strong>Basic Design and Installation of Irrigation Systems</strong></td>
<td>HRT 323</td>
<td>12</td>
<td>—</td>
</tr>
<tr>
<td><strong>Business Practices for the Landscape Professional</strong></td>
<td>LAN 457</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td><strong>Insect Pests of Landscape Plants</strong></td>
<td>HRT 381</td>
<td>18</td>
<td>—</td>
</tr>
<tr>
<td><strong>Tree Management</strong></td>
<td>HRT 422</td>
<td>14</td>
<td>25</td>
</tr>
<tr>
<td><strong>Landscape Management</strong></td>
<td>HRT 443</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td><strong>Disease Identification &amp; Management</strong></td>
<td>HRT 481</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Weed Identification &amp; Management</strong></td>
<td>HRT 482</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td><strong>Mathematics for Horticulturists</strong></td>
<td>HRT 356</td>
<td>6</td>
<td>—</td>
</tr>
<tr>
<td><strong>TOTAL REQUIRED HOURS</strong></td>
<td></td>
<td>201</td>
<td></td>
</tr>
</tbody>
</table>

**Arboriculture**  TRACK 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to Plant Science</strong></td>
<td>HRT 300</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td><strong>Soil Science I: Physical Properties</strong></td>
<td>HRT 301</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Soil Science II: Chemistry and Nutrition</strong></td>
<td>HRT 302</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Tree Climbing for Arborists</strong></td>
<td>HRT 304</td>
<td>18</td>
<td>—</td>
</tr>
<tr>
<td><strong>Pruning Principles and Practices</strong></td>
<td>HRT 321</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Landscape Plants: Fall Trees and Shrubs</strong></td>
<td>HRT 331</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Landscape Plants: Conifers</strong></td>
<td>HRT 333</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Landscape Plants: Spring Trees and Shrubs</strong></td>
<td>HRT 334</td>
<td>18</td>
<td>—</td>
</tr>
<tr>
<td><strong>Insect Pests of Landscape Plants</strong></td>
<td>HRT 381</td>
<td>18</td>
<td>—</td>
</tr>
<tr>
<td><strong>Tree Management</strong></td>
<td>HRT 422</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Urban Tree Care</strong></td>
<td>HRT 426</td>
<td>18</td>
<td>—</td>
</tr>
<tr>
<td><strong>Winter Tree Identification</strong></td>
<td>HRT 440</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Disease Identification &amp; Management</strong></td>
<td>HRT 481</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>TOTAL REQUIRED HOURS</strong></td>
<td></td>
<td>194</td>
<td></td>
</tr>
</tbody>
</table>

**Sustainable Garden Design**  TRACK 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to Plant Science</strong></td>
<td>HRT 300</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td><strong>Soil Science I: Physical Properties</strong></td>
<td>HRT 301</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td><strong>Landscape Plants: Broadleaved Evergreens</strong></td>
<td>HRT 332</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Landscape Plants: Spring Trees and Shrubs</strong></td>
<td>HRT 334</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Landscape Plants: Spring Perennials</strong></td>
<td>HRT 336</td>
<td>18</td>
<td>—</td>
</tr>
<tr>
<td><strong>Landscape Plants: Late Season Perennials &amp; Grasses</strong></td>
<td>HRT 338</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td><strong>Landscape Plants: Annuals</strong></td>
<td>HRT 341</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Landscape Plants: Bulbs</strong></td>
<td>HRT 342</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Annual and Perennial Garden Maintenance</strong></td>
<td>HRT 344</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Plants for Landscaping</strong></td>
<td>HRT 358</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td><strong>Plant Communities</strong></td>
<td>HRT 140</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td><strong>Sustainable Garden Care</strong></td>
<td>HRT 395</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td><strong>Sustainable Garden Design</strong></td>
<td>HRT 551</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td><strong>Landscape Design History</strong></td>
<td>LAN 301</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td><strong>Graphics I</strong></td>
<td>LAN 311</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td><strong>TOTAL REQUIRED HOURS</strong></td>
<td></td>
<td>202</td>
<td></td>
</tr>
</tbody>
</table>

*Course hours do not include exam hours
**Courses offered in the Spring–Summer Catalog
P Courses with a prerequisite before you can register

For professional organizations, see p. 35.

**QUESTIONS?** CONTACT PROGRAM COORDINATOR
CHARLES YURGALEVITCH, PH.D.,
AT HTRCOORDINATOR@NYBG.ORGW
CERTIFICATE CLASSES
Open to Non-Certificate students

INTRODUCTION TO PLANT SCIENCE  ALL TRACKS
This user-friendly intro course surveys the major plant groups—flowering plants, conifers, ferns, and bryophytes—focusing on their form and structure. Become botanically literate and gain practical experience in dissecting and analyzing plant structures. | $395/$435

8 Sundays, 10/18–12/13 (no class 11/29), 10:30 am–12:30 pm
Nina Naghshineh | Online | 212HRT300AO

8 Fridays, 10/23–12/18 (no class 11/27), 9:30 am–11:30 pm
Nicole Fusco | Online | 212HRT300BO

5 Tuesdays and 3 Thursdays, 11/10–12/8 (no class 11/26), 6–8 pm
Giselle Herrera | Online | 212HRT300CO

4 Mondays & 4 Wednesdays, 1/11–2/18 (no class 1/18), 10:30 am–12:30 pm
Steve Kutos | Online | 213HRT300DO

8 Saturdays, 1/23–3/20 (no class 2/13), 10:30 am–12:30 pm
Manny Grossman | Online | 212HRT300EO

8 Thursdays, 1/28–3/18, 6–8 pm
Giselle Herrera | Online | 213HRT300FO

8 Fridays, 2/5–3/26, 10 am–12 pm
Leslie Day | Online | 213HRT300GO

SOIL SCIENCE I  ALL TRACKS
Soil is a dynamic, living organism and the very foundation of sustainable horticulture and agriculture. This course focuses on the texture, structure, density, and color of different soils and the dynamic relationship that exists among soil, water, and plants. Through lectures and at-home labs, learn irrigation and drainage techniques and explore how soil, organic matter, and microbiology relate to plant health and soil conservation. | $455/$495

7 Mondays, 10/5–11/23 (no class 10/12), 10:30 am–1:30 pm
Manny Grossman | Online | 212HRT301AO

7 Sundays, 10/25–12/13 (no class 11/29), 12–3 pm
Kathary Grossman | Online | 212HRT301BO

7 Tuesdays, 1/19–3/2, 2–5 pm
Kathary Grossman | Online | 213HRT301PO

6 Saturdays, 1/23–3/6 (no class 2/13), 10:30 am–1:30 pm
George Lozefski | Online | 213HRT301CO

10 Mondays, 2/22–4/26, 6–8 pm
Manny Grossman | Online | 213HRT301DO

SOIL SCIENCE II: CHEMISTRY AND NUTRITION  TRACKS 1, 2, & 3
This course is for horticulturists and gardeners familiar with the basic culture of perennials. Learn the identifying characteristics, classification, scientific and common names, and landscape uses of 60 summer- and fall-blooming native and non-native perennials and grasses. Prerequisite: Intro to Plant Science | $395/$445

6 Tuesdays, 1/12–2/16, 10 am–1 pm
George Lozefski | Online | 213HRT302O

What’s Trending in Horticulture

PLANT COMMUNITIES
Fundamentally change the way you view natural landscapes by learning about the complex factors that inform which plants grow in what combinations. Understanding how and why these plant communities form will help you design beautiful landscapes that are more resilient, diverse, and harmonious. Blended class: online and on-site | $169/$185

3 Fridays, 9/25–10/9, 9:30 am
Jessica Schuler | NYBG & Online | 211HRT140BL

NEW TECHNOLOGIES IN URBAN FARMING
As growing urban populations deplete arable land and potable water, innovative agri-entrepreneurs - aeroponics, aquaponics, and hydroponics to grow food indoors without soil. Three NYC-based experts will discuss their systems and what these new technologies mean for agriculture, climate, and culture today. | $15/$18

Thursday, 10/8, 6–7 pm
Charles Yurgalevitch | Online | 212HRT155AO

Thursday, 2/4, 6–7 pm
Charles Yurgalevitch | Online | 213HRT155BO

NEW! GROWING CANNABIS
Study the entire cannabis growing cycle, including best practices for critical harvest and post-harvest procedures and how artificial lighting and carbon dioxide enrichment can help maximize production. We’ll discuss the pros and cons of different grow sites and media, with extra emphasis on hydroponic production. In addition, the fundamentals of laws regulating cannabis production in the tri-state area will also be presented.

Prerequisite: Introduction to Plant Science | $195/$215

6 Thursdays, 10/15–11/19, 6–8 pm
Matthew DeBacco | Online | 212HRT156AO

6 Tuesdays, 11/10–12/15, 6–8 pm
Matthew DeBacco | Online | 212HRT156BO

6 Wednesdays, 1/27–3/3, 6–8 pm
Matthew DeBacco | Online | 213HRT156CO

INTRODUCTION TO HYDROPONICS
Growing plants without soil using hydroponics promotes rapid growth and requires less water and space than conventional gardens. Learn what systems work best, which plants to choose, and how to ensure they get proper nutrition. While our focus is on home-scale systems, wider applications of hydroponics are also covered.

Prerequisite: Introduction to Plant Science | $195/$215

5 Tuesdays, 2/2–3/2, 6:15–8:15 pm
Maya Kutz & Kate Lodvikov | Online | 213HRT141O

CUT FLOWER FARMING
Design, plant, and harvest a cutting garden that’s productive throughout the seasons. You’ll get hands-on practice starting seeds to ensure you always have something fresh to cut. We’ll cover traditional and unexpected annual and perennial cut flower species and varieties that grow well locally.

| $169/$185

3 Thursdays, 2/11–2/25, 6:15–8:15 pm
Anne Marie Breyer | Online | 213HRT142BO

† The start time for all sections is as listed; end times vary. See website for the full schedule.

☞ Exam on last class date.
**LATE SEASON PERENNIALS & GRASSES**

**TRACK 4**

This course is designed for horticulturists and gardeners who are familiar with the basic culture of perennials. Learn the identifying characteristics, classification, scientific and common names, and landscape uses of approximately 60 summer- and fall-blooming native and non-native perennials and grasses. Please dress appropriately for outdoors. Blended class: online and on-site. Prerequisite: *Intro to Plant Science* | $295/$325

3 Wednesdays, 9/23–10/14, 5:30–7:30 pm & 3 Saturdays 9/26, 10/3, 10/17, 10am–12 pm (no class 10/7 or 10/10)

Michael Hagen | NYBG & Online | 211HRT338ABL

4 Tuesdays, 9/29–10/20, 10 am †

Michael Ruggiero | NYBG & Online | 213HRT338BBL

**DISEASE IDENTIFICATION & MANAGEMENT**

**TRACKS 1, 2, & 3**

Learn common diseases of woody and herbaceous ornamentals and turfgrass, and the cultural, biological, and least-toxic strategies for their control. Blended: online and on-site. Prerequisite: *Intro to Plant Science* | $475/$495

3 Sundays, 10/4–10/25, 10 am–1 pm & 4 Thursdays, 10/8–10/29, 6:15–8:30 pm

Mark Kokinchak | NYBG & Online | 212HRT481ABL

**FALL TREES AND SHRUBS**

**TRACK 3**

Explore how to identify and use shade trees and shrubs that are native to and thrive in our region, including *Acer*, *Quercus*, and *Viburnum*, which are particularly ornamental in fall. Blended class: online and on-site Prerequisite: *Intro to Plant Science* $295/$325

5 Sundays, 10/4–11/8 (no class 10/12), 10 am †

Owen McLaughlin | NYBG & Online | 212HRT331CBL

5 Wednesdays, 10/14–11/4, 10 am †

Michael Ruggiero | NYBG & Online | 212HRT331BBL

**PLANTS FOR LANDSCAPING**

**TRACK 4**

Choose the right plant for the right place, based on site-specific design and maintenance criteria. Learn landscape values such as size, texture, color, and flowering and fruiting seasons. Review trees, shrubs, groundcovers, annuals, and perennials suitable for this region. Blended class: online and on-site $395/$435

6 Sundays, 10/4–11/15 (no class 10/11), 10 am †

Shauna Moore | NYBG & Online | 212HRT481ABL

6 Wednesdays, 10/14–12/2 (no class 11/11 or 11/25), 10 am †

Timothy Nolan | NYBG & Online | 212HRT358CBL

**PLANT PROPAGATION**

**TRACK 1**

Learn principles and techniques of plant propagation by seed and cuttings. Explore basic sexual and asexual propagation, focusing on fruit development, seedling production, root initiation, stem and leaf cuttings, and layering. Prerequisite: *Intro to Plant Science* (or Program Coordinator approval) $479/$525

6 Sundays, 10/4–11/15 (no class 10/11), 10 am–1 pm

Nick Storrs | Online | 211HRT411PO

6 Saturdays, 1/28–3/4, 10 am–1 pm

Michael Ruggiero | Online | 213HRT411BO

**LANDSCAPE GARDENING**

**TRACK 2**

Learn the basics of ecologically-appropriate landscape gardening. Topics include soil preparation, efficient watering and fertilization, planting and transplanting, cultivation, and plant maintenance. Prerequisites: *Intro to Plant Science* and *Soil Science* $455/$495

9 Thursdays, 9/24–11/19, 4:30 pm †

Mobee Weinstein | NYBG & Online | 211HRT311BL

**WEED ID & MANAGEMENT**

**TRACK 2**

Examine a variety of methods, including herbicide and non-chemical, for controlling turf and landscape weeds found in residential and commercial sites. Study weed biology, biochemical pathways, equipment calibration and care, as well as seasonal weed control programs. Prerequisite: *Intro to Plant Science* $355/$395

5 Mondays, 10/5–11/16 ✦, 4:30–7:30 pm

Erica DeLuca | NYBG & Online | 212HRT482BLS

**GREENHOUSE PRACTICES**

**TRACK 1**

This intro course covers practical greenhouse skills and integrated management techniques. Topics include structures and equipment, soils and other growing media, irrigation and fertilization, potting and repotting, and cultural practices. Prerequisites: *Intro to Plant Science* and *Soil Science* $359/$395

8 Thursdays, 10/15–12/10 (no class 11/26), 5–7:15 pm

Nick Gershberg | Online | 212HRT312PO
PRUNING PRINCIPLES AND PRACTICES TRACKS 2 & 3
Through classwork and hands-on practice, develop pruning tools and techniques to help identify, prune, confiers, broadleaves, evergreens, and deciduous plants thrive. Explore how woody plant structure and physiology influence pruning. Learn how to create and maintain hedges and explore authentic pollarding techniques. Come dressed for fieldwork, and bring bypass pruners if you have them. Fall classes to be blended: online and on-site.
Prerequisite: Intro to Plant Science $385/$425
6 Thursdays, 10/29–12/10 (no class 11/26), 2 pm †
Bill Logan | NYBG & Online | 212HRT321ABL
6 Tuesdays, 11/3–12/15 (no class 11/24) 10 am †
Bill Logan | NYBG & Online | 212HRT321BL
6 Fridays, 1/22–2/26 10 am †
Bill Logan | NYBG & Online | 213HRT321ABL
6 Saturdays, 1/23–3/6, (no class 2/13), 1 pm †
Samuel Bishop | NYBG & Online | 213HRT321CBL
6 Thursdays, 2/11–3/18, 10 am †
Bill Logan | NYBG & Online | 213HRT321DBL

BROADLEAVED EVERGREENS TRACK 4
Become familiar with the cultural requirements, identifying features, and uses of native and non-native broadleaved evergreens, and incorporate them into both naturalistic and formal landscape settings. Major plant groups studied include Ilex, Rhododendron, Buxus, and evergreen groundcovers. Blended class: online and on-site.
Prerequisite: Intro to Plant Science $219/$239
4 Sundays, 11/1–11/22, 10:30 am †
Vincent Simeone | NYBG & Online | 212HRT332BL

TREE MANAGEMENT TRACKS 2 & 3
Develop a holistic approach to keep trees healthy and vigorous. Topics include planting and transplanting, pruning, fertilization, root system management, common problems, tree defenses, and lightning protection.
Prerequisite: Pruning Principles and Practices and Soil Science II $335/$369
7 Wednesdays, 1/6–2/17 & Monday, 1/11, 1–3 pm
Wayne Cahilly | NYBG & Online | 213HRT422S

PLANT PROPAGATION II TRACK 1
Learn to work with plants that are difficult to propagate by seed or cuttings. Subjects include advanced seed propagation and techniques of grafting, budding, and micro-propagation. Learn tissue culture at NYBG’s Pfizer Laboratory, and tour a retail nursery for a hands-on grafting project.
Prerequisite: Plant Propagation I $425/$469
4 Wednesdays, 1/27–2/17, 5:30–7:30 pm & Sunday, 2/28, 10:30 am–2:30 pm
Mobe Weinstein | NYBG & Online | 213HRT412BL

BUSINESS PRACTICES FOR THE LANDSCAPE PROFESSIONAL TRACK 2
Explore how to effectively organize and operate a small landscape business that will sustain itself and earn a profit. We will discuss how to attract new clients, position oneself in a crowded market and choose the right type of business model. Gain experience in preparing proposals and contracts, pricing services and materials, and creating budgets. You will walk away from this class with a basic plan to guide you in creating a successful business.
Prerequisite: Intro to Plant Science $295/$305
6 Wednesdays, 10/7–11/18 (no class 11/11), 10:15 am–12:15 pm
Jessica Zavaglia | Online | 212LAN457AO
6 Thursdays, 2/25–4/1, 10:15 am–12:15 pm
Jessica Zavaglia | Online | 213LAN457BO

WINTER TREE IDENTIFICATION TRACK 3
Learn basic winter tree identification using dormant-season characteristics of deciduous plants as well as conifers. Dress for the weather. Blended class: online and on-site.
Prerequisite: Intro to Plant Science $295/$325
4 Thursdays, 1/14–2/4th, 1 pm †
Bill Logan | NYBG & Online | 213HRT440BL

CHAINSAWS: USE, SAFETY, AND MAINTENANCE TRACK 3
Whether you are a budding arborist or weekend woodcutter, knowing how to use your chainsaw safely and maintain it properly are critical skills. An ISA-certified arborist teaches you the basics of chainsaw use and care, sharpening, and bar tensioning. No chainsaw will be handled in class. $145/$159
3 Sundays, 1/31–2/21, (no class 2/14), 10 am–12:10 pm
Julian Picciano | Online | 213HRT308O

ANNUAL AND PERENNIAL GARDEN MAINTENANCE TRACK 4
Manage annual and perennial gardens with a variety of practices: soil and weed management, watering, pest identification and control, and seasonal clean-up. Develop a management plan for a small perennial garden.
Prerequisites: Soil Science I and Plants for Landscaping or Late Season Perennials & Grasses $195/$215
4 Sundays, 1/24–2/21 (no class 2/14), 10 am–12 pm
Sean Tarantino | NYBG & Online | 213HRT344BL

CONIFERS TRACK 3
Learn to identify, classify, and use the best regional native and non-native conifers for naturalistic and formal landscape designs.
Prerequisite: Intro to Plant Science $295/$325
5 Wednesdays, 2/7–3/3, 2 pm †
Michael Ruggiero | NYBG & Online | 213HRT333BL

SUSTAINABLE GARDEN DESIGN TRACK 4
This studio-oriented course covers basic site analysis, planting plans, and color schemes (analogous or sequential, complementary, and monochrome). Presentations, discussions, and design projects combine practical information with theoretical garden design.
Prerequisites: Graphics I, Annuals, Spring Perennials, and Late Season Perennials & Grasses $485/$535
7 Mondays, 2/22–4/5, 6–8:50 pm
Marie Salembier | Online | 213HRT551O

LANDSCAPE MANAGEMENT TRACK 2
Examine sustainable techniques for managing and maintaining commercial and residential landscapes. Develop programs that reduce adverse effects on the environment, including alternative approaches to conventional lawn management.
Prerequisite: Intro to Plant Science and Soil Science II $579/$635
8 Thursdays, 2/25–4/15, 4:30–7:10 pm
David Laswell | NYBG & Online | 213HRT443BL

CERTIFICATION EXAM
30-HOUR PREPARATION FOR PESTICIDE APPLICATOR CERTIFICATION EXAMINATION
Prepare for the Core (Basic) and Category 3 (Ornamentals and Turf) exams New York State Department of Environmental Conservation requires all pesticide applicators. We’ll cover handling, use, storage, and application of pesticides; safety and environmental considerations; and insects and diseases. You must purchase several manuals, and must have either three years of work experience or at least 30 hours of class instruction to be eligible to take these exams. DEC CEUs available.
7 Tuesdays & 6 Thursdays, 1/5–2/16 (no class 1/26), 4:15–6:45 pm
Shawn Spencer | NYBG & Online | 213HRT357BLS

リフォーム

The start time for all sections is as listed; end times vary. See website for the full schedule.
Exam on last class date.
If you have a passion for plants and helping people, then pursue horticultural therapy and learn how to bring people and the natural environment together for healing purposes. Acquire the therapeutic skills and horticultural techniques needed to serve a broad population of people in need. Enroll in a single class or pursue a Horticultural Therapy Certificate.

THE CERTIFICATE PROGRAM

Respected nationwide, the NYBG Horticultural Therapy Certificate Program helps students begin or complement their careers through an in-depth exploration of skills and innovative methods that use plants and the growing environment to heal and rehabilitate people. Practicing horticultural therapists train students to design, implement, and operate programs for individuals and groups across a variety of health care settings and human services programs.

Upon completion of the program, students will:

- Understand the characteristics and etiologies of the various populations served by horticultural therapy.
- Demonstrate skills in goal setting, activity planning, risk management, evaluation methods, plant selection, and accessible design.
- Prepare proposals to deliver horticultural therapy programs in various venues, including public settings, not-for-profit organizations, private companies, and independent contracting services.

Wild Plum, *Prunus americana*, Watercolor on paper, ©Jane Hancock
CERTIFICATE REQUIREMENTS

Certificate students must complete 189 course hours, 8 site visit hours, and a 100-hour internship. After completing a minimum of six Horticultural Therapy courses, students should contact the Program Coordinator to arrange their internship.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Horticultural Therapy</td>
<td>THR 301</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Horticultural Therapy for Exceptional Youth</td>
<td>THR 402</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Horticultural Therapy for Physical Rehabilitation</td>
<td>THR 403</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Horticultural Therapy for Older Adults</td>
<td>THR 401</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Fundamentals of Gardening</td>
<td>GAR 301</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Horticultural Therapy in Behavioral Health Settings**</td>
<td>THR 404</td>
<td>15</td>
<td>—</td>
</tr>
<tr>
<td>Horticultural Therapy Methods and Materials**</td>
<td>THR 406</td>
<td>15</td>
<td>—</td>
</tr>
<tr>
<td>Activities Analysis for Horticultural Therapy</td>
<td>THR 407</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Introduction to Plant Science</td>
<td>HRT 300</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>Plant Propagation I: Basic Principles</td>
<td>HRT 411</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>Garden Design for Special Populations</td>
<td>THR 408</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Horticultural Therapy Program Management**</td>
<td>THR 409</td>
<td>15</td>
<td>—</td>
</tr>
<tr>
<td>Horticultural Therapy Site Visits (see note below)</td>
<td></td>
<td>8</td>
<td>—</td>
</tr>
<tr>
<td>TOTAL REQUIRED HOURS</td>
<td></td>
<td>189</td>
<td></td>
</tr>
</tbody>
</table>

Site Visits—During the pandemic, we have suspended trips to observe working programs at hospitals and other institutions. Site visits remain a Certificate requirement, and we plan to resume scheduling them as soon as it is safe to do so.

**Courses offered in the Spring–Summer Catalog

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION TO HORTICULTURAL THERAPY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explore the plant–people relationships and scientific research that are the foundations of horticultural therapy. Review current hort therapy programs, and the cognitive, physical, psychological, and social benefits of plants and plant-related activities for various populations. Build disability awareness and therapeutic skills.</td>
<td>$375/$415</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Wednesdays and 3 Fridays, 10/7–10/23, 9–11:30 am</td>
<td>Anne Meore, HTR</td>
<td>Online</td>
<td>212THR301AO</td>
</tr>
<tr>
<td>3 Saturdays, 1/9–1/30 (no class 1/16), 9–11:30 am &amp;</td>
<td>Anne Meore, HTR</td>
<td>Online</td>
<td>213THR301BO</td>
</tr>
<tr>
<td>3 Tuesdays, 1/12–1/26, 5–7:30 pm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HORTICULTURAL THERAPY FOR OLDER ADULTS

Older adults present an increasing need for therapeutic services. Learn the physical, sensory, cognitive, psychological, and social aspects of aging, and how horticulture can be an important component of geriatric care.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Horticultural Therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explore the plant–people relationships and scientific research that are the foundations of horticultural therapy. Review current hort therapy programs, and the cognitive, physical, psychological, and social benefits of plants and plant-related activities for various populations. Build disability awareness and therapeutic skills.</td>
<td>$419/$459</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Wednesdays &amp; 2 Mondays, 9/16–10/7 (no class 9/28), 6:30–9 pm</td>
<td>Phyllis D’Amico, HTM</td>
<td>Online</td>
<td>211THR401O</td>
</tr>
</tbody>
</table>

HORTICULTURAL THERAPY FOR EXCEPTIONAL YOUTH

Gain insights into the causes and characteristics of developmental, sensory, physical, behavioral, and learning disabilities in children and adolescents with special needs. Learn to implement horticultural therapies that meet a range of goals in programs for preschool through high school. Explore brain-based research, and activities that can improve perceptual development and the learning process.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORTICULTURAL THERAPY FOR PHYSICAL REHABILITATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharpen your clinical skills while learning how horticultural therapy can enhance physical rehabilitation. Explore the team treatment process and the various conditions treated in this setting. Learn about etiology, diagnosis, and psychosocial effects, and the horticultural therapist’s role in assessing, documenting, and developing treatment goals and objectives. Review case studies and develop treatment plans.</td>
<td>$419/$459</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Saturdays, 11/7–12/19 (no class 11/28), 10 am–12:30 pm</td>
<td>Matthew Wichrowski, HTR</td>
<td>Online</td>
<td>212THR403O</td>
</tr>
</tbody>
</table>

GARDEN DESIGN FOR SPECIAL POPULATIONS

Learn the latest research in therapeutic garden design, common design principles, and the issues and accommodations needed to create, renovate, and evaluate effective gardens for groups with special needs.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITIES ANALYSIS FOR HORTICULTURAL THERAPY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learn how to structure horticultural therapy activities so a client’s progress can be clearly measured and assessed. You will develop a needs assessment and activity plan, write specific goals with measurable objectives, and practice leadership skills needed to work with groups and individuals.</td>
<td>$419/$459</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Wednesdays, 2/17–3/3, 6:30–9 pm &amp; 3 Saturdays, 2/20–3/6, 10 am–12:30 pm</td>
<td>Abby Jaroslow, HTR</td>
<td>Online</td>
<td>213THR407O</td>
</tr>
</tbody>
</table>

CONTACT PROGRAM COORDINATOR

Phyllis D’Amico, HTM, Program Coordinator
Anne Meore, HTR, Program Advisor

QUESTIONS? CONTACT PROGRAM COORDINATOR
Phyllis D’Amico, HTM, at THRCOORDINATOR@NYBG.ORG

COLLEGE CREDIT RECOMMENDATION

National College Credit Recommendation Service (NCCRS) recognizes the nine Horticultural Therapy courses to be the equivalent of college level instruction. In order to apply for one college credit hour per course, a passing grade of C or better is required. NYBG recommends you pass all 9 courses before applying for college credit, at which time you will pay a $45 administrative fee to NYBG and a $52 application & transcript fee to Excelsior. For more info, call the Registration Office at 718.817.8747.

The nine Horticultural Therapy courses are also accredited by the American Horticultural Therapy Association (AHTA) and can be applied toward voluntary Professional Registration through the AHTA. See p. 35 for more information.
The need to develop, preserve, and protect our open spaces and environmental and cultural resources has never been greater. NYBG’s engaging, career-oriented program gives you a solid, plant-focused foundation. Take a single class for pleasure or pursue a professional Certificate in Landscape Design.

THE CERTIFICATE PROGRAM

Whether you’re changing careers or taking yours to the next level, the NYBG Landscape Design Certificate distinguishes your portfolio and showcases your development as a creative professional. And that puts you ahead—with colleagues, employers, and clients. Outstanding instructors who are working professionals guide you through a comprehensive program, where you will:

- Analyze existing landscapes, identify site-specific problems, and develop design solutions.
- Prepare planting plans that are practical, sustainable, and aesthetically pleasing for a variety of projects.
- Demonstrate skills associated with site engineering practices, principles, and techniques.
- Develop strategies for professional success using business skills in preparing proposals, pricing, purchasing, and more.
CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TIER 1 – Introductory Classes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Design History</td>
<td>LAN 301</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Graphics I</td>
<td>LAN 311</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Landscape Measurement**</td>
<td>LAN 340</td>
<td>12</td>
<td>—</td>
</tr>
<tr>
<td>Landscape Plants: Fall Trees and Shrubs</td>
<td>HRT 331</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Landscape Plants: Spring Trees and Shrubs**</td>
<td>HRT 334</td>
<td>12</td>
<td>—</td>
</tr>
<tr>
<td>Plants for Landscaping</td>
<td>HRT 358</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td><strong>TIER 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Design I: Site Analysis and Schematic Design</td>
<td>LAN 401</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Landscape Design II: Design Development</td>
<td>LAN 402</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Estimating</td>
<td>LAN 380</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Graphics II**</td>
<td>LAN 411</td>
<td>24</td>
<td>—</td>
</tr>
<tr>
<td>Site Materials and Details</td>
<td>LAN 422</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td><strong>TIER 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grading &amp; Drainage</td>
<td>LAN 421</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Graphics III</td>
<td>LAN 417</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Landscape Design III: Planting Design</td>
<td>LAN 403</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Business Practices for Landscape Professional</td>
<td>LAN 457</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Landscape Design IV: Design and Construction**</td>
<td>LAN 520</td>
<td>33</td>
<td>—</td>
</tr>
<tr>
<td>Portfolio and Presentation Skills</td>
<td>LAN 555</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL REQUIRED HOURS</td>
<td></td>
<td>337</td>
<td></td>
</tr>
</tbody>
</table>

*Course hours do not include exam hours  **Courses offered in the Spring–Summer Catalog  †Courses with a prerequisite before you can register

For professional organizations, see p. 35.

QUESTIONS? CONTACT PROGRAM COORDINATOR
SUSAN COHEN AT LANCOORDINATOR@NYBG.ORG

STUDENT INFORMATION
In addition to the course fees listed, students should anticipate spending approximately $700 on class materials while completing their Certificate. Students should expect that homework will be assigned in most courses.

Whether you’re changing careers or taking yours to the next level, the NYBG Landscape Design Certificate distinguishes your portfolio and showcases your development as a complete professional. Our curriculum, instructors, and influential alumni network make this the gold standard in Certificate programs. And that puts you ahead—with colleagues, employers, and clients.

INTRO TO LANDSCAPE DESIGN
Gain an introduction to the terminology, concepts, and basic principles of landscape design through lectures and simple two-dimensional exercises. This course is recommended for students with little or no background in design who are considering a Certificate. I $185/$205
4 Mondays, 10/19–11/9, 10 am †
Daryl Beyers | Online | 212LAN100AO

NEW! INTRO TO PHOTOSHOP FOR LANDSCAPE DESIGNERS
Now more than ever, clients expect to see beautiful digital plans. Learn the basics of how to scan and enhance hard drawings. Gain familiarity with the tools to create digitally rendered plans, sections, perspectives, and collages. Basic computer skills are a must. Please note: participants must have access to Adobe Photoshop. I $295/$325
6 Mondays, 10/19–11/23, 6:30–8:30 pm
Adam Molinski | Online | 212LAN444O

SOCIAL MEDIA STRATEGIES
Learn to develop and implement a Facebook, Instagram, Twitter, and Pinterest strategy to showcase your work and attract and engage followers. A smartphone with aforementioned apps pre-installed is required. $115/$129 Certificate Requirement
3 Thursdays, 1/14–1/28, 5–7:20 pm
Candace Thompson | Online | 213BL394O

BASIC WEBSITE DESIGN
A professional online presence is the key to growing your business. In this hands-on class, you will build a simple website (no coding required!) to showcase your portfolio using the free Wix.com platform and free online photo-editing tools. Internet proficiency necessary. I $155/$169 Certificate Requirement
3 Thursdays, 1/14–1/28, 5–7:20 pm
Candace Thompson | Online | 213BL395O

DYNASCAPE: CAD FOR LANDSCAPE DESIGNERS
Learn the various tools and applications of this software package for landscape designers. Topics include: developing base plans from surveys, techniques for quick estimates, and utilizing the online plant database. Basic computer skills and PC laptop required. I $555/$609 (There is an additional software fee of $125. Special cancellation policy applies.)
8 Fridays, 1/15–3/5, 10 am–1 pm
William Harris Einhorn, RLA | Online | 213LAN4270

NEW! GREEN ROOF DESIGN
Explore best practices for analyzing sites, balancing weight restrictions with programmatic goals, selecting resilient plant palettes, managing stormwater, and more. Propose your own original green-roof design as a final project. I $325/$365
6 Mondays, 9/21–11/2 (no class 10/12), 6–8 pm
David Holzman | Online | 211LAN461O
CONCEPTS: DIGITAL SKETCHING
Explore the Concepts app to create a 2-D landscape plan on your iPad or Surface Device. Learn to sketch directly on the screen, import and modify existing assets, produce a precise drawing to scale, and export your plan into hi-resolution formats that can be used in AutoCAD, Photoshop, or Adobe Illustrator. $155/$169
3 Saturdays, 2/20–3/6, 10 am–1 pm
Cat Morris | Online | 213LAN223O

LANDSCAPE DESIGN HISTORY
This course is also required for the Horticulture Certificate TRACK 4.
Explore theories, traditions, and principles that have shaped landscape design from antiquity to the present, through visual presentations, assigned readings, projects, and classroom discussion. $595/$655 Certificate Requirement
9 Tuesdays, 2/2–3/30, 10 am–1 pm
Paula Sarathy | Online | 213LAN301CO
9 Thursdays, 2/4–4/1, 6:15–9:15 pm
Mark Bunnell, RLA | Online | 213LAN301DO

GRAPHICS I
This course is also required for the Horticulture Certificate TRACK 4.
Graphics are essential in developing and communicating your ideas. Practice various graphic techniques on a range of materials and equipment and learn how to organize and render landscape plans on paper for optimal presentation to clients. Homework required. $595/$655 Certificate Requirement
8 Mondays, 10/26–12/14, 6–9 pm
Elizabeth Poccia | Online | 212LAN311O

LANDSCAPE DESIGN I: SITE ANALYSIS AND SCHEMATIC DESIGN
Turning a vision into a plan is the designer’s first challenge. Analyze landscapes, formulate the requirements of a design project and then translate them into schematic design solutions. Take part in class discussions and critiques, and present projects. Extensive out-of-class design homework required. $595/$655 Certificate Requirement
8 Mondays, 2/1–3/29 (no class 2/15), 6:15–9:15 pm
David Holzman | Online | 213LAN401O

LANDSCAPE DESIGN II: DESIGN DEVELOPMENT
Apply basic design to site-specific problems, focusing on the process of design development. Start with a concept, then progress through the schematic phase to a preliminary design solution. Examine the relationships of landscape elements and materials to the design process. Prerequisite: Landscape Design I and Graphics II $575/$635 Certificate Requirement
8 Wednesdays, 3/17–5/5, 6:15–9:15 pm
David McConnell | Online | 213LAN402AO

GRAPHICS III
Build and expand your graphic presentation skills to create professional presentations for clients with Trimble SketchUp, a 3D sketching software program. Laptop computers (PC or Mac) with SketchUp are required. Prerequisite: Graphics II $595/$655 Certificate Requirement
8 Thursdays, 10/1–11/19, 10 am–1 pm
William Harris Einhorn, RLA | Online | 212LAN417O

LANDSCAPE DESIGN III: PLANTING DESIGN
Through a series of design assignments, prepare a variety of planting plans that are practical, appropriate, and aesthetically satisfying. Explore the significance of site conditions as well as plant form, texture, color, and ecological associations. Prerequisite: Landscape Design II, Graphics III, and Plants for Landscaping. Recommended: Landscape Plants: Fall Trees and Shrubs and Landscape Plants: Spring Trees and Shrubs $575/$635 Certificate Requirement
8 Wednesdays, 1/13–3/3, 2–5 pm
Stacie Ellickson | Online | 213LAN403O

NEW! BUSINESS PRACTICES FOR THE LANDSCAPE PROFESSIONAL
Explore how to effectively organize and operate a small landscape business that will sustain itself and earn a profit. We will discuss how to attract new clients, position oneself in a crowded market and choose the right type of business model. Gain experience in preparing proposals and contracts, pricing services and materials, and creating budgets. You will walk away from this class with a basic plan to guide you in creating a successful business. $295/$305
6 Wednesdays, 10/7–11/18 (no class 11/11), 10:15 am–12:15 pm
Jessica Zavaglia | Online | 212LAN457AO
6 Thursdays, 2/25–4/1, 10:15 am–12:15 pm
Jessica Zavaglia | Online | 213LAN457BO

GRADING & DRAINAGE
Through discussion, fieldwork and homework, students will identify landforms and watersheds, calculate slopes, and manipulate contours to create garden rooms and control water flow. Learn how to communicate design ideas to contractors and evaluate the opportunities and constraints of a project site. Prerequisite: Landscape Measurement, Landscape Design I, and Graphics II $575/$635 Certificate Requirement
5 Wednesdays, 10/14–11/11, 5:30–7:30 pm & 5 Fridays, 10/16–11/13 (Rain date 11/20), 10 am–1 pm
Alice Eckerson | NYBG & Online | 212LAN428ABL

SITE MATERIALS AND DETAILS
Learn the basic principles of constructing residential landscape features such as walks, steps, simple decks, garden structures, walls, and benches. Study landscape construction standards, techniques, and commonly used materials, and learn to draft construction details. Prerequisite: Graphics II $575/$635 Certificate Requirement
8 Tuesdays, 1/26–3/16, 10 am–1 pm
TBA | Online | 213LAN422O

ESTIMATING
Learn how accurately estimating landscape materials, labor, overhead, and contingencies can help you stay profitable and compete successfully in today’s business climate. Prerequisite: Landscape Design II $219/$239 Certificate Requirement
4 Fridays, 1/15–2/5, 10 am–12:15 pm
Alice Eckerson | Online | 213LAN380O

PORTFOLIO AND PRESENTATION SKILLS
Create visually compelling print and digital portfolios to present to potential clients. Learn how to develop professional documentation for a variety of audiences through in-class design charrettes and individualized projects. Prerequisite: Landscape Design III $379/$415 Certificate Requirement
7 Tuesdays, 3/9–4/20, 6:30–8:40 pm
Adam Molinski | Online | 213LAN555O

INSTRUCTOR BIOS CAN BE FOUND ONLINE AT NYBG.ORG/ADULTED
Landscape Design Students & Alumni Series

Renowned professionals share their expertise in this popular afternoon lecture series that coincides with morning meetings of the Landscape Design Students and Alumni Association.

TUESDAYS, 1–2 PM | ONLINE

Registration fee for each lecture: $15/$18
Register for all six lectures and receive a discount: $79/$99

For more information about the LDSA, see p. 35.

THE YEAR-ROUND GARDEN

Award-winning gardener-lecturer-naturalist David Culp has spent more than 30 years creating a four-season blooming habitat and sanctuary on two-acres of hillside nestled between forks of the Brandywine River. As in his latest book, A Year at Brandywine Cottage, Culp encourages us to choose plants for 12 months of interest, weave edibles into the mix, and bring the bounty indoors with simple arrangements and homegrown recipes.

Principal of David L. Culp Designs and owner of Brandywine Snowdrops, David Culp has received the Pennsylvania Horticultural Society’s Distinguished Garden Award, and his The Layered Garden was named 2013’s Best Overall Book by the Garden Writers Association.

Tuesday, 11/17 | 1–2 pm | Online
212LAN265BO

CULTIVATING A CREATIVE LIFE

Frances Palmer centers her creative life—and daily photo shoots—in an airy studio inside her Connecticut barn. The celebrated potter, gardener, cook and entrepreneur was trained as an art historian, but became obsessed with dahlias after spotting one in a gardening book. Today, growing all flowers is her passion, and they fill her extraordinary pots that have been featured in The New York Times Magazine, Vogue, Elle Decor, Martha Stewart Living, Architectural Digest, and scores of other publications. Drawing on insights from her debut book, Life in the Studio: Inspiration and Lessons on Creativity, Palmer focuses on what matter most: determination, routine, prioritization, perseverance, and perspective.

Tuesday, 12/15 | 1–2 pm | Online
212LAN265CO

A TRANSPLANTED GARDENER

In 2015, renowned garden writer and designer Page Dickey moved from Duck Hill—the beloved 1830’s North Salem farmhouse and 3-acre garden she’d owned and loving tended for 33 years—to the 1830’s North Salem farmhouse and 3-acre garden she’d owned and loving tended for 33 years—to

Tuesday, 10/20 | 1–2 pm | Online | 212LAN265AO

FEDERAL TWIST

When James Golden set out to create a wet prairie in western Jersey, he faced heavy clay, standing water, and a derelict woodland. Eschewing traditional approaches, he planted right into the matrix of weedy invasives, without mulching, amending the soil, or spraying herbicide—unconventional methods Thomas Rainer and Claudia West call “a daring dance with nature.” Today, Golden’s acclaimed Federal Twist is a lush riot of hardy grasses and perennials given structure by tall, architectural plants, and has been profiled in Gardens Illustrated, The New York Times, Rainer and West’s Planting in a Post-Wild World, Claire Takacs’s Dreamscape, and Christopher Wood’s Gardenlust.

Tuesday, 1/26, 1–2 pm | Online | 213LAN265DO

AN EYE FOR DESIGN

Founding principal of Kathryn Herman Design in New Canaan, Kathryn Herman brings a strong horticultural background and intense interest in architecture to the international residential and commercial work that has garnered her firm recent Arthur Ross, Palladio, Stanford White, and Connecticut ASLA awards. Her own historic garden—reflecting her passion for classic British landscapes, with thematic plantings and a 114-foot-long garden room packed with perennials and backed by mature trees—has been included on the Garden Conservancy’s Open Days and featured in Architectural Digest. In 2012, Herman was elected into the New England Design Hall of Fame for her contributions to landscape design.

Tuesday, 2/16, 1–2 pm | Online | 213LAN265EO

THE HEALING POWER OF NATURE AND DESIGN

Britt Zuckerman is Senior Landscape Architect at Dirtworks—a NY Landscape Architecture practice dedicated to creating spaces that bridge differences in age, ability, and culture through shared experiences and a close connection to nature. She will present recent Dirtworks projects, including their master plan for The Lakeshore Foundation in Birmingham, Alabama, an internationally renowned organization serving some 4,000 unique individuals annually through physical activity, sport, recreation, advocacy, policy, and research.

Zuckerman earned her Master’s degree from Columbia University, and speaks regularly at venues such as AIA’s New York Chapter, the NYC Parks Dept., The North Shore Garden Club, and on various conference panels.

Tuesday, 3/16, 1–2 pm | Online | 213LAN265FO
In our teeming metropolis, nature is all around us in diverse habitats, from the cracks in our sidewalks to our parks and our beaches.

THE CERTIFICATE PROGRAM

The NYBG Urban Naturalist Certificate Program equips you with the skills you need to become an effective environmental steward. On the Garden grounds and in select city parks, you will learn to keenly observe the natural world, create scientifically useful records of your observations, and investigate the interrelationships between species. NYBG Urban Naturalists work as environmental educators, help manage invasive species in local parks, and volunteer with our EcoFlora project to help document NYC plant species.

To receive a Certificate, you must select a natural site, and after making in-depth observations there over many months, present a survey of the plants and animals found there and a plan for how the site can be improved to provide ecological and social benefits. Guidelines are available online.

CERTIFICATE REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Plant ID</td>
<td>BOT 308</td>
<td>6</td>
<td>33</td>
</tr>
<tr>
<td>Two of the four Native Flora courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Flora in Autumn</td>
<td>BOT 331</td>
<td>P 33</td>
<td></td>
</tr>
<tr>
<td>Native Flora in Winter</td>
<td>BOT 332</td>
<td>P 33</td>
<td></td>
</tr>
<tr>
<td>Native Flora in Spring**</td>
<td>BOT 333</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Native Flora in Summer**</td>
<td>BOT 334</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Natural History of Birds</td>
<td>NAT 321</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>Natural History of Insects</td>
<td>NAT 322</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td>Introduction to Urban Ecology</td>
<td>NAT 338</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>The Ecosystems of New York City **</td>
<td>NAT 337</td>
<td>P 6</td>
<td></td>
</tr>
<tr>
<td>Urban Ecology Field Study Workshop**</td>
<td>NAT 323</td>
<td>P 9</td>
<td></td>
</tr>
<tr>
<td>Elective Credits (See current electives below)</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL REQUIRED HOURS

100

ELECTIVES

The following Naturalist courses—along with all Botany electives listed on pages 9–10 count toward the 30 required elective hours.

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Flora: Growing Between the Cracks</td>
<td>NAT 332</td>
<td>6</td>
<td>33</td>
</tr>
<tr>
<td>Spotlight on Bird Songs</td>
<td>NAT 341</td>
<td>3</td>
<td>33</td>
</tr>
</tbody>
</table>

**Courses offered in the Spring-Summer Catalog

Courses with a prerequisite before you can register

QUESTIONS? CONTACT PROGRAM COORDINATOR
NANCY SLOWIK AT NATCOORDINATOR@NYBG.ORG
BASIC PLANT ID
This is the class for plant-lovers eager to up their game! Learn the terminology and basic botanical nomenclature that will help you recognize and describe key differences in common plants. | $145/$159
3 Tuesdays, 10/6–10/20, 5–7 pm
Clara Holmes | Online | 212BOT308AO
3 Thursdays, 1/21–2/4, 6–8 pm
Clara Holmes | Online | 213BOT308BO

NATIVE FLORA IN AUTUMN
In autumn our native Northeast flora can be spectacular, but difficult to identify. With a 10X power hand lens and a plant key, you’ll learn to identify these wildflowers, shrubs, and trees on the Garden grounds. Blended class: online and on-site.
$295/$325 Certificate Requirement
5 Fridays, 9/25–10/23 (rain date: Saturday, 10/24) 9 am †
Nancy Slowik | NYBG & Online | 212NAT321AO

NATURAL HISTORY OF BIRDS: FALL
With its wide variety of habitats and its position on the Atlantic Flyway, NYC is a bird-lover’s paradise. Over 300 distinct resident or migratory species live here or pass through, including many nesting species such as Peregrine Falcons, Red-tailed Hawks, Yellow Warblers, and Baltimore Orioles. You will practice observing distinctive feather patterns, beak and body shapes, and evaluating songs and behaviors to improve your ability to identify species in the field and to use field guides effectively. We’ll emphasize the role individual birds play in our ecosystem, while enjoying the unique nature of autumnal birding!
$295/$325 Certificate Requirement
2 Tuesdays, 10/6 & 10/13 & 2 Thursdays, 10/8 & 10/15, 10 am–1 pm
Ken Chaya | Online | 212NAT321AO

NATURAL HISTORY OF INSECTS
Delve into the fascinating world of the creatures that make up 84% of the Animal Kingdom—what renowned biologist E.O. Wilson once called “the little things that run the world." We’ll discuss the critical and fascinating roles that insects play—in maintaining healthy ecosystems, as well as their own complex social systems. We will explore the wonder of metamorphosis and the amazing variety of defensive strategies and adaptations insects have developed to survive. Ample time will be spent on garden grounds, observing insects and learning how to identify them. | $225/$245 Certificate Requirement
6 Fridays, 10/2–10/16, 10 am–1 pm
Ken Chaya | Online | 212NAT3220

SPOTLIGHT ON BIRD SONGS
Did you know that Blue Jays can mimic the cry of a Red-tailed Hawk? Train your ear to find them as well as other talented mimics, comical improvisers, brilliant songsters, and heart-throb spring soloists. The vocalizations of our native birds are many and vary widely from soft chip notes to navigational flight calls, territorial declarations, and lovely courtship serenades—explore these distinctions during class. | $95/$105 Certificate Elective
Thursday, 10/29, 10 am–1 pm
Ken Chaya | Online | 212NAT341O

SPOTLIGHT ON BIRD SONGS
Did you know that Blue Jays can mimic the cry of a Red-tailed Hawk? Train your ear to find them as well as other talented mimics, comical improvisers, brilliant songsters, and heart-throb spring soloists. The vocalizations of our native birds are many and vary widely from soft chip notes to navigational flight calls, territorial declarations, and lovely courtship serenades—explore these distinctions during class. | $95/$105 Certificate Elective
Thursday, 10/29, 10 am–1 pm
Ken Chaya | Online | 212NAT341O

URBAN FLORA: GROWING BETWEEN THE CRACKS
Urban flora can be found in unlikely places, from city sidewalks and highway medians, to lawns and other man-made environments. Most of these plants are introduced and many are considered weeds. Explore their origins, life cycles, and benefits to the urban landscape while learning how to identify them in the field. | $125/$139 Certificate Elective
3 Thursdays, 10/22–11/5, 10 am–12 pm
Nancy Slowik | Online | 212NAT332O

INTRODUCTION TO URBAN ECOLOGY
Urbanization is changing biodiversity, interspecies relationships, and even animal behavior, in the tri-state area and beyond. Liz Johnson, former manager of AMNH’s Metropolitan Biodiversity Program, will introduce you to the particular habitats found here, as well as plants and animals common to each. She’ll also reveal why certain species of flora and fauna (like the new genus of centipede she and K. Catley discovered in Central Park!) thrive in our highly altered, fragmented urban environment, while others do not, and what this means for our collective future. | $125/$139 Certificate Requirement
2 Thursdays, 2/25 & 3/4, 10 am–12 pm
Liz Johnson | Online | 213NAT338O

NATIVE FLORA IN WINTER
In class and in forays around the Garden, you’ll learn to recognize the winter characteristics of native and common woody plants by bud types, leaf scars, fruit remnants, and other distinguishing marks. | Basic Plant ID or Plant Structure $295/$325 Certificate Requirement
6 Fridays, 1/8–2/12, 11 am–1 pm
Nancy Slowik | NYBG & Online | 213BOT332BL

INTRODUCTION TO URBAN ECOLOGY
Urbanization is changing biodiversity, interspecies relationships, and even animal behavior, in the tri-state area and beyond. Liz Johnson, former manager of AMNH’s Metropolitan Biodiversity Program, will introduce you to the particular habitats found here, as well as plants and animals common to each. She’ll also reveal why certain species of flora and fauna (like the new genus of centipede she and K. Catley discovered in Central Park!) thrive in our highly altered, fragmented urban environment, while others do not, and what this means for our collective future. | $125/$139 Certificate Requirement
2 Thursdays, 2/25 & 3/4, 10 am–12 pm
Liz Johnson | Online | 213NAT338O

The following BOTANY courses detailed on page 10 count toward your URBAN NATURALIST CERTIFICATE:
AUTUMN MUSHROOMS
THE SCIENCE OF TREE COMMUNICATION
PRESSING PLANTS FOR ART & SCIENCE
WINTER MUSHROOMS
FOREST ECOLOGY
Full descriptions can be found online.

† The start time for all sections is as listed; end times vary. See website for the full schedule.
Wellness

Find new ways to bring healthful plants into your everyday life.

TAI CHI FOR PEACE OF MIND AND BODY
This ancient, meditative Chinese exercise teaches relaxation, balance, and self-defense with an emphasis on correct body posture and spinal alignment. Students become relaxed, physically stronger, and ultimately healthier in both mind and body. Outside only. In the event of inclement weather, see website for details. | $119/$129
8 Saturdays, 9/26–11/21 (no class 10/10), 11:30–12:30 pm
Robert Torres | NYBG | 211WEL102B
8 Saturdays, 1/23–3/20 (no class 2/13), 10–11 am
Robert Torres | NYBG | 212WEL102B

ESSENTIAL OIL PERFUME WORKSHOP
Perfume can be traced back thousands of years to an Ancient Egyptian tradition, beloved by Cleopatra. Discover the history of perfume and the therapeutic benefits of essential oils in this hands-on workshop! Learn scent-blending techniques and how to identify and keep perfume notes. Formulate three unique signature scents using wax, carrier oils, and essential oils, and one solid perfume, a 2-oz. aromatherapy spray, and a roll-on perfume. Students are required to purchase materials from the list provided on our website. | $59/$65
Wednesday, 10/14, 6–8 pm
Karine Gordineer | Online | 212WEL134AO
Saturday, 2/27, 11 am–1 pm
Karine Gordineer | Online | 213WEL134BO

CANDLEMAKING WITH ESSENTIAL OILS
Freshen your home while experiencing the soothing benefits of essential oils. Herbalist Amandine Peter will demonstrate how to create custom-scented aromatherapy soy candles using essential oils to invigorate, calm, or heal. You'll also learn the differences between petroleum-based paraffin candles and synthetic essential oil candles commonly sold in stores. | $45/$49
Friday, 10/16, 6–8 pm
Amandine Peter | Online | 212WEL138AO
Sunday, 2/7, 11 am–1 pm
Amandine Peter | Online | 213WEL138BO

GUT HEALTH: THE KEY TO YOUR IMMUNE SYSTEM
Your digestive system is home to over 70% of your immune system! So keeping your gut in tip-top shape is crucial to maintaining good health. We will examine the difference between good and bad bacteria and explore how each affects your energy level, skin, and overall health. We'll focus on how to strengthen your digestion and create better eating habits, including by introducing fermented foods and herbal medicine into your diet. | $45/$49
Wednesday, 11/18, 7–8:30 pm
Cheryl Paswater | Online | 212WEL215AO
Friday, 1/15, 7–8:30 pm
Cheryl Paswater | Online | 213WEL215BO

WINTER SKINCARE
Cold weather and indoor heat can really take its toll on our skin. We will explore some of the best plant based ingredients for specific skin types, and how to combine them into beneficial, ultra-hydrating body care products. You will create your own customized winter skincare system, using ingredients you’ll receive in a materials kit delivered to your home. | $175/$195
2 Sundays, 1/24 & 1/31, 11 am–1 pm
Elizabeth Scholl | Online | 213WEL168O

HERBALISM: BEYOND THE BASICS
Take a deep dive into a hands-on approach to herbal medicine. We'll cover the medicinal properties and uses of close to 100 local or easy-to-source healing plants, from nervines that calm to cardiotonics that stimulate circulation. Herbalist Karine Gordineer will show you how to properly infuse, blend, and decoct as you create your own herbal apothecary that will include teas, salves, tinctures, syrups, vinegars, compresses, and poultices. | $425/$469
4 Wednesdays, 1/27, 2/17, 3/17, & 4/14, 5:30–8:15 pm &
4 Saturdays, 1/30, 2/20, 3/20, & 4/17, 11 am–1:45 pm
Karine Gordineer | Online | 213WEL161O

MEDICAL CANNABIS
Some 33 states have legalized the medical use of marijuana. Proponents tout it as a safe, effective treatment for symptoms of cancer, HIV, MS, Parkinson’s, and other conditions—while opponents see many physical and social risks. Explore the science behind this controversial plant, as Dr. Dahmer takes you through a brief history of the endocannabinoid system, its effects on the brain, its associated risks and disorders, and an overview of medical cannabis—today and in the future—in New York and across the country. | $35/$39
Friday, 1/22, 6:30–8 pm
Stephen Dahmer, M.D. | Online | 213WEL128O

NATURAL BODY SCRUB
Explore the versatile and surprisingly low-cost array of body scrubs you can make with a few simple ingredients. Learn which oils are the most emollient, which botanicals tighten and which soothe inflammations, and when to choose which specific sugar or salt for your exfoliant. | $45/$49
Friday, 1/29, 6–8 pm
Amandine Peter | Online | 213WEL156O

Emmer Wheat, *Triticum dicoccum* (detail), Watercolor on paper, ©Susan L. Mintun
Saturday Online Herbal Workshops

Saturdays, January 9, 23, & February 6

Herbs have been helping us stay healthy for thousands of years. Spend some time with herbal experts and learn how plants can be used for medicine, aroma, and refreshment.

INTRO TO HERBAL MEDICINE
Are you interested in bringing the natural benefits of herbs and herbal remedies into your life? Discover the differences between herbal medicine and homeopathy, the three major branches of herbalism, and the fascinating history of herbal medicine. Learn how to choose and store herbs, how to properly take herbal medicines, and how to make and use several common herbal remedies that help reduce stress.

January 9, 10:30 am–12:30 pm
Karine Gordineer | $39/$45 | 213WEL130BO

KITCHEN HERB GARDEN
No more shopping at the market for basil and parsley! Learn how to create your own kitchen mini-garden with fresh herbs that you can enjoy year-round. Find out which herbs are easiest to maintain, which grow lights to use, and all the tips and tricks for growing herbs and spices indoors.

January 23, 10:30 am–12 pm
Christopher Satch | $39/$45 | 213WEL130CO

HERBAL TEAS & INFUSIONS
Herbal healing can be as simple as a cup of tea! We’ll dive into the medicinal qualities and uses of easy-to-find herbs, and how to combine their roots, leaves, flowers, fruit, and seeds into effective, pleasing blends.

February 6, 10:30–11:30 am
Arvolyn Hill | $25/$29 | 213WEL130DO

All three sections: $99/$119 | 213WEL130AO
Academic Policies & Procedures

COURSE LEVELS
100–299 Short, non-credit courses
300–399 Basic (may have prerequisites)
400–499 Intermediate (may have prerequisites)
500–599 Advanced (may have prerequisites)
600–699 Classes with a Master
700–799 Symposia
800–899 Lectures
900–949 One-day, hands-on workshops
950–999 Intensive Programs

COURSES WITH PREREQUISITES
In order to register for courses with prerequisites, students must have received a passing grade in the prerequisite course(s).

WORK-STUDY OPPORTUNITIES
For information about work-study opportunities with Adult Education, please call 718.817.8802.

SCHOOL POLICIES FOR CERTIFICATE PROGRAMS
The Director and Program Coordinators formulate policy regarding standards of student performance, including awarding Certificates, rules of conduct, and student appeals. Please contact the Director with any questions or concerns at 718.817.8595.

Satisfactory Academic Progress Policy:
Student progress is measured by grades for Certificate courses, while Non-Certificate courses are not graded.

<table>
<thead>
<tr>
<th>Grade</th>
<th>GPA</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>94-100</td>
</tr>
<tr>
<td>A−</td>
<td>3.7</td>
<td>90-93</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>83-86</td>
</tr>
<tr>
<td>B−</td>
<td>2.7</td>
<td>80-82</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>73-76</td>
</tr>
<tr>
<td>C−</td>
<td>1.7</td>
<td>70-72</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
<td>67-69</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>60-66</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>0-59</td>
</tr>
<tr>
<td>NC</td>
<td>0</td>
<td>NO CREDIT</td>
</tr>
</tbody>
</table>

All coursework (final exams, papers, projects) must be completed on time unless the instructor grants additional time for extenuating circumstances.

Grades are available via your online student account. Call 718.817.8747 for help creating an online account, to receive grades over the phone, or request a transcript.

All incomplete grades will be converted to an F within 4 weeks if work is not completed by then. A student must repeat a course and earn a passing grade in order to receive a Certificate; additional course materials will be charged at cost.

Previous Education Credit
A student may qualify for course exemption through:
- College courses taken for degree credit from an accredited college or university
- Evaluated non-collegiate sponsored instruction
- Proficiency exams

To be exempt from a required course, you must complete the Course Exemption Request Form, present transcripts showing an earned grade of C or higher, and present the course outline and/or relevant supporting documentation. The School will evaluate these submissions and make a decision. If exempted from the course, you must take an equal number of hours of approved elective course(s).

Attendance
On-time attendance is required at all classes. Unexcused tardiness and absences are not accepted, unless due to an emergency, including serious illness or death within a student’s family. Absences should be reported to the Registration Office at 718.817.8720 and will be evaluated on a case-by-case basis. Students must request makeup tests, which will be scheduled at the instructor’s discretion. Deficiency in any required work resulting from absence from class must be made up at the student’s own expense to satisfy the instructor.

Student Work
Students have 8 weeks following the last day of class to pick up any work left by instructors at the Registration Office. After that time, unclaimed assignments will be discarded.

Certificate Requirements
Certificate requirements are those stated in the catalog from which the student first registered for a Certificate course.

To qualify for a Certificate, students must receive passing grades in all required courses. Students have 6 years from the start of their first required course to complete a Certificate.

Certificate Graduation Ceremony
The 2021 ceremony will be held on Sunday, June 6. If you expect to complete your Certificate requirements or enroll in all remaining classes by June this year, you must inform the Manager of Student Services in writing at adulteducation@nybg.org by March 27. You will be informed if you are eligible for a Certificate by April 19. Call the Registration Office at 718.817.8747 with any questions.

Transcripts
Official ($4 each) and unofficial transcripts (free) are available from the Registration Office. Request an official transcript in writing, including the name and address of the institution to which the transcript should be mailed. Transcripts will be mailed within 2 weeks, with a copy sent to the student.

STATE LICENSING AND ACCREDITATION
The School of Horticulture and Landscape Design—which includes three programs: Horticulture, Horticultural Therapy, and Landscape Design—is licensed by the New York State Board of Proprietary School Supervision (BPSS), a division of the New York State Department of Education. Licensure under the state recognizes the Certificate Programs in Horticulture, Horticultural Therapy, and Landscape Design as high quality and career oriented.

Students of Licensed Private Schools in the State of New York have the right to file a complaint with the New York State Education Department if they believe that the School or anyone representing the School has acted unlawfully. Students may make complaints about the conduct of the school, advertising, standards and methods of instruction, equipment, facilities, qualifications of teaching and management personnel, enrollment agreement, methods of collecting tuition, School license or registration, School and student records, private School agents, and other charges.

To file a complaint, students should write to the New York State Education Department’s Bureau of Proprietary School Supervision at 116 West 32nd Street, 5th Floor, New York, NY 10001, or call the Department at 212.643.4760, requesting an interview for the purpose of filing a written complaint. All relevant documents must be brought to the interview. If you cannot attend an interview, send a letter or call the Bureau to request a complaint form. You must complete and sign the form and mail it to the Bureau, including copies of all relevant documents. The Bureau cannot investigate any complaint made more than 2 years after the date of alleged occurrence.

Disclaimer
Content of courses and opinions expressed by instructors are their own and do not necessarily reflect the opinions or views of The New York Botanical Garden. The information provided does not, and is not intended to, constitute legal advice. No representation is made that any information provided constitutes the most up-to-date legal or other information.

Privacy
The School of Horticulture and Landscape Design complies with the Federal Education Rights and Privacy Act of 1974. The following categories of information concerning individual students and former students may be made available to the general public: name, attendance dates, telephone listing, date and place of birth, field of study, and previous education institutions attended by the student. Students may request that any of the above information not be released without their prior consent.

STATE LICENSING AND ACCREDITATION
The School of Horticulture and Landscape Design complies with the Federal Education Rights and Privacy Act of 1974. The following categories of information concerning individual students and former students may be made available to the general public: name, attendance dates, telephone listing, date and place of birth, field of study, and previous education institutions attended by the student. Students may request that any of the above information not be released without their prior consent.

STATE LICENSING AND ACCREDITATION
The School of Horticulture and Landscape Design complies with the Federal Education Rights and Privacy Act of 1974. The following categories of information concerning individual students and former students may be made available to the general public: name, attendance dates, telephone listing, date and place of birth, field of study, and previous education institutions attended by the student. Students may request that any of the above information not be released without their prior consent.

STATE LICENSING AND ACCREDITATION
The School of Horticulture and Landscape Design complies with the Federal Education Rights and Privacy Act of 1974. The following categories of information concerning individual students and former students may be made available to the general public: name, attendance dates, telephone listing, date and place of birth, field of study, and previous education institutions attended by the student. Students may request that any of the above information not be released without their prior consent.

STATE LICENSING AND ACCREDITATION
The School of Horticulture and Landscape Design complies with the Federal Education Rights and Privacy Act of 1974. The following categories of information concerning individual students and former students may be made available to the general public: name, attendance dates, telephone listing, date and place of birth, field of study, and previous education institutions attended by the student. Students may request that any of the above information not be released without their prior consent.

STATE LICENSING AND ACCREDITATION
The School of Horticulture and Landscape Design complies with the Federal Education Rights and Privacy Act of 1974. The following categories of information concerning individual students and former students may be made available to the general public: name, attendance dates, telephone listing, date and place of birth, field of study, and previous education institutions attended by the student. Students may request that any of the above information not be released without their prior consent.
Registration & General Information

Registration
The quickest way to register for a class is to visit nybg.org/adulted

Many classes fill quickly, so please sign up early to avoid disappointment!

Accessibility
NYBG is accessible to persons with disabilities. Please ask about special needs accommodations when you register or visit nybg.org for more information.

A WORD ON ONLINE CLASSES
The confirmation email you receive upon registration includes the Zoom link for your class. A reminder email with the meeting link will also be sent the day before the class begins.

Please do not wait to register, as our most popular classes fill up quickly. We do, however, try to open additional sections of sold out classes whenever possible, so add your name to the wait list to help us determine interest. You’ll receive notice of priority registration when new classes are added. And keep an eye out for Adult Ed e-newsletters with the latest updates on new classes, sections and speakers.

A WORD ON BLENDED COURSES
Blended courses mean that instruction takes place both online via Zoom and in-person. The in-person instruction takes place entirely outside on NYBG grounds, rain or shine. We believe this is essential for horticulture, botany, and naturalist students to become proficient at identifying plants and understanding their culture, ecology, and maintenance requirements.

Safety remains our top priority. Everyone on Garden grounds is required to wear a face covering and maintain six feet of social distance at all times. Registered students will have the option to download an app and use personal headphones with your own device to ensure you hear the instructor clearly.

Operating system requirements: Android 5 OS or higher; iPhone iOS 10 or higher.

Refunds and Withdrawals
No discounts will be granted for missed classes. There are no refunds or credits 24 hours before a course begins.

A refund will be issued if your class is cancelled due to low enrollment. If you wish to withdraw from a course before it begins, you must notify the Registration Office ten full business days before the first class meeting. We will issue a refund minus a $10 processing fee.

- If you must withdraw fewer than ten days before the first class meeting:
  - No refunds will be granted for course levels 0–299 and 700–999
  - A 75% refund minus a $10 processing fee will be granted for course levels 300–699. Please note: Floral Design materials fees will not be refunded fewer than 5 business days before class begins.

Holidays
NYBG observes the following 10 holidays:
New Year’s Day; Martin Luther King, Jr. Day; Presidents’ Day; Memorial Day; Independence Day; Labor Day; Columbus Day; Thanksgiving and the following Friday (Veterans’ Day observance); and Christmas

Entrance to the Garden on Class Days
You must bring your printed confirmation letter for admission to the Garden, and present it at the Moshulu Entrance to gain admittance and free parking.

Garden Membership
Become a Member today and receive year-round admission, access to Garden programs, discounts at NYBG Shop and on Adult Education classes, and exclusive invitations to special Member Days, Trips, Tours, and Programs. For more information, call 718.817.8703 or visit nybg.org/membership

Registration is Easy!

Web
Register online at nybg.org/adulted

Phone
718.817.8747 Registration Office
M–F 9 am–5 pm

The Garden | Quick and easy to reach:
Bronx River Parkway (Exit 7W)

Metro-North Railroad to Botanical Garden Station
B D 4 2

Midtown Education Center
Two blocks from Grand Central Terminal
20 West 44th Street, between 5th and 6th Avenues; 212.302.2054

The Midtown Education Center is currently closed.

Gift Certificates
Need the perfect gift for that plant-loving someone?
Purchase a gift certificate at nybg.org/adulted for a NYBG class and give the gift of learning.
Keep Growing at NYBG

Change your career. Beautify your green space. Exercise your creativity. Renew your spirit. The New York Botanical Garden has hundreds of classes to educate, inspire, and guide you.

Classes meet online and in our 250 magnificent acres in the Bronx.

- Portuguese Quince, Cydonia oblongata ‘Portugal’, Colored pencil on paper, ©Margaret Best