NYBG

ADULT EDUCATION | SPRING–SUMMER 2021

New York Botanical Garden
Welcome 2021

This spring, more than ever, people are eager to get outdoors, connect with nature, and tend to their gardens again.

In a moment when so many are looking to nature for refuge and meaning, this catalog is filled with new and enriching ways to put you in touch with the natural world, whether you're working on a Certificate, refining a skill, or pursuing a new passion.

Throughout spring and summer, NYBG courses will continue online—with a full slate of classes in art, botany, floral design, landscape design, gardening, and more. And we'll continue to bring you a lineup of inspiring speakers.

Ecologist Suzanne Simard shares insights from her thought-provoking new memoir, Finding the Mother Tree. Celebrated gardeners Dan Pearson and Midori Shintani showcase their work at Japan's Tokachi Millennium Forest. Two Hidden History talks reveal the valuable medical and agricultural knowledge enslaved Africans brought with them to the Americas. And as the Garden comes alive with the exhibition KUSAMA: Cosmic Nature, we'll offer a fascinating lecture with guest curator Mika Yoshitake.

As we enter a new season, we're so grateful to you, our community of students and friends, for staying with us as we grow and learn together. And while we wait for the day when we welcome you back to the Watson Education Building and our Midtown Center classrooms, let's all take care of our own gardens—wherever they are.

Registration is now open. Please visit nybg.org/adulted or call 718.817.8720.

Please don't wait too long to register! Many classes fill up quickly. When classes sell out, we do try to open additional sections, so kindly add your name to the wait list and 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 updates on new classes, sections, and speakers.

Prices listed are Member/Non-Member. Not a Member yet? Call 718.817.8703.
“The guidance from instructors goes above and beyond, which is invaluable now more than ever. No one gets lost along the way and we’re fully engaged with each other’s work! The quality of NYBG’s online classes is unique with nothing sacrificed and all details covered.”

— ERIKA DUNCAN, Current Student

ABOUT THE COVER: Solanum lycopersicum
‘Zapotec Pleated’, Asuka Hishiki Official Entry

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

This spectacular heirloom tomato originated centuries ago and was cultivated by the Zapotec people of Oaxaca, Mexico. 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.

The exhibition is co-presented with the American Society of Botanical Artists.

On the cover: Zapotec Pleated Heirloom Tomato, Solanum lycopersicum
‘Zapotec Pleated’, Watercolor on paper, ©Asuka Hishiki
Cultivating Diversity from Seed to Table

Three prominent experts come together for a lively exchange celebrating the ways in which chefs, artists, and plant breeders can promote diversity in the plants that we eat. The conversation is inspired by the luminous paintings of heirloom edibles and their wild relatives in Abundant Future: Cultivating Diversity in Garden, Farm, and Field—the Fourth NYBG Triennial exhibition with the American Society of Botanical Artists (ASBA).

Dan Barber, chef and co-owner of Blue Hill and Blue Hill at Stone Barns, is on a mission to reimagine food from the ground up. He discusses his work with plant breeders like Michael Mazourek to pursue new varieties of vegetables and grains with jaw-dropping deliciousness.

Plant breeder and Cornell professor Michael Mazourek discusses how the relationship between people and the crops we cultivate has changed over time—from our ancient ancestors who domesticated wild plants to modern plant breeders who cross-pollinate crops in the quest to promote resilience and genetic diversity.

World-renowned botanical artist and ASBA Director of Exhibitions Carol Woodin shares the fascinating stories behind some of the edible plants featured in the Abundant Future exhibition, such as the revived ‘Edinburgh Potato’ painted in exquisite detail by the late Lizzie Sanders, and Akiko Enokido’s sumptuous ‘Shishigatani Pumpkin’.

KUSAMA: Cosmic Nature
April 10—October 31, 2021

This landmark exhibition explores artist Yayoi Kusama’s lifelong fascination with the natural world. Highlights include the artist’s colossal polka-dotted flowers and pumpkins, soft sculptures, and mesmerizing botanical paintings, alongside spectacular horticultural displays.

Cosmic Nature: Embracing the Unknown

Guest Curator Mika Yoshitake discusses the organic forms central to Kusama's unique vision that integrates nature and human nature, the earthly and the cosmic. Emphasizing the pivotal role of biomorphic imagery from both microcosmic and macrocosmic perspectives, Yoshitake examines the visceral impact of Kusama’s artistic language and the ways life and afterlife profoundly coexist in the artist's lifelong journey of embracing the unknown.

Mika Yoshitake, Ph.D., is an independent curator with expertise in postwar Japanese art. As Curator of the Hirshhorn Museum and Sculpture Garden (2011–18), she curated Yayoi Kusama: Infinity Mirrors (2017–19) among other exhibitions. Upcoming curatorial projects include the international tour of Yoshitomo Nara (2021-22) at LACMA, a major retrospective at M+ Hong Kong (2022–23), and Breath(e): Towards Climate and Social Justice (2024) at the Hammer Museum.
Hidden Histories

In the Shadow of Slavery: Africa’s Food Legacy in the Atlantic World

Much of Professor Judith Carney’s groundbreaking research focuses on African contributions to New World agriculture and ecology. In this talk, she shows how enslaved people established familiar foods from Africa, such as rice, okra, yams, black-eyed peas, and millet, as staples in their subsistence plots, what Carney calls the “botanical gardens of the dispossessed.”

A professor of geography at UCLA, Judith Carney, Ph.D., conducts research in sub-Saharan Africa and Latin America that examines gender, food systems, and agroecological change, as well as African contributions to New World environmental history. She is the author of numerous research articles and two award-winning books, Black Rice: The African Origins of Rice Cultivation in the Americas and In the Shadow of Slavery.

Tuesday, May 4, 11 am–12 pm
Online | 214HRT821O | $15/$18

Medicine, Knowledge, and Power in the Atlantic Slave Trade

Even as they were brutally forced from their homelands, enslaved Africans brought valuable medical and botanical knowledge with them to the Americas. Professor Carolyn Roberts highlights how African plant expertise was incorporated into 18th-century science and used to sustain the largest forced oceanic migration ever to occur in human history. She will discuss which plants enslaved Africans used, how they made medicines, and what present-day phytochemical research reveals about why these medicines were so effective.

Carolyn Roberts, Ph.D., is a historian of medicine and acclaimed educator with a joint appointment in the departments of History/History of Science and Medicine and African American Studies at Yale. Her current book project, To Heal and To Harm: Medicine, Knowledge, and Power in the Atlantic Slave Trade, will be the first full-length study of the history of medicine in the British slave trade.

Tuesday, May 18, 11 am–12 pm
Online | 214BOT288O | $15/$18

FINDING THE MOTHER TREE

A Conversation with Suzanne Simard

As a pioneer in the field of plant communication, ecologist Suzanne Simard has spent a lifetime rigorously documenting the forests of North America and the Arctic. Rather than simple collections of individual plants, these forests are complex communities of interdependent species that share resources and rely on one another for survival.

Through this thought-provoking lens, Simard shares fascinating insights into how trees have evolved to perceive one another, recognize their neighbors, and remember the past; how they elicit warnings and mount defenses; and how they compete and cooperate with one another. She shows how these arboreal systems mimic both our neural networks and the structure of our civil societies, and how the ancient hubs of these communities—what she calls Mother Trees—play a crucial role in a given forest's vitality.

A professor of forest ecology at the University of British Columbia and author of a new memoir, Finding the Mother Tree, Suzanne Simard, Ph.D., has been shaped by her personal journey, including a childhood spent in the logging world of British Columbia's rain forests that taught her to love and respect trees.

Lecture followed by conversation with Todd Forrest, Arthur Ross Vice President for Horticulture and Living Collections.

Tuesday, June 8, 1–2 pm
Online | 214BOT814O | $15/$18
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.

- Fordhook Zucchini, *Cucurbita pepo* ‘Fordhook’, Colored pencil on paper, ©Seongweon Ahn
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.

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<td>The Basics of Visual Composition (should be completed early)</td>
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<td>Botanical Drawing III: Focus on Flowers</td>
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<td>Plant Morphology for Botanical Artists</td>
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<td>Botanical Watercolor I</td>
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<td>Practical Aspects of Botanical Art**</td>
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**Plus one of the following:**
- Internet Tools for Creatives, Social Media** | BIL 394 | 5 | — |
- Internet Tools for Creatives, Website**        | BIL 395 | 7 | — |
- Pen and Ink                                     | BIL 400 | 18 | 7 |
- 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.

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<td>BIL 405</td>
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<td>Painting Orchids</td>
<td>BIL 399</td>
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<td>Introduction to Gouache: Painting Magnolia Leaves</td>
<td>BIL 419</td>
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<td>Egg Tempera Techniques</td>
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<td>7</td>
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<td>Painting and Drawing Owls</td>
<td>BIL 422</td>
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<td>7</td>
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<tr>
<td>Insects in Colored Pencil</td>
<td>BIL 439</td>
<td>12</td>
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*Plus a final project that meets Certificate standards
**Courses offered in the Fall–Winter Catalog
†Courses with a prerequisite before you can register

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

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.

FINAL PROJECT FOR CERTIFICATION: If you plan to graduate in June 2021, the final project due date is April 30, 2021. In order to be considered for graduation, you must submit a project proposal for approval to Robin Jess, the Program Coordinator. You must also show your work-in-progress to Robin at least once. Guidelines can be obtained by emailing adulted@nybg.org

Illustration: The Dancing Cricket and his Blue Mushroom, Leratiomyces, ©Anastasia Traina, 2019 Graduate

The Tri-State Botanical Artists of NYBG

TSBA is a lively group of more than 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! See p. 39 for more information.
**Weekend watercolor**

**Online Workshops**

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

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

**SPRING TULIPS**
Saturday, 4/17, 11 am–4:30 pm  
Laura Vogel | Online | 214BIL207AO

**DAFFODILS**
Sunday, 5/23, 11 am–4:30 pm  
Susan Sapanara | Online | 214BIL240O

**NEW! ROSES**
Sunday, 6/6, 11 am–4:30 pm  
Adele Rossetti | Online | 214BIL236O

**DAYLILIES**
Sunday, 6/27, 11 am–4:30 pm  
Sarah Wry | Online | 214BIL228O

**BIRDS OF PARADISE**
Sunday, 7/25, 11 am–4:30 pm  
Laura Vogel | Online | 221BIL211O

**ROSE OF SHARON**
Saturday, 8/7, 11 am–4:30 pm  
Laura Vogel | Online | 221BIL266O

Registration fee for each section: $105/$115

**Focus on dry brush!**

**RED GRAPES IN DRY BRUSH WATERCOLOR**
Saturday, 5/15, 11 am–4:30 pm  
Carrie Di Costanzo | Online | 214BIL220O

**CHERRIES IN DRY BRUSH WATERCOLOR**
Sunday, 6/13, 11 am–4:30 pm  
Carrie Di Costanzo | Online | 214BIL239O

**PEACHES IN DRY BRUSH WATERCOLOR**
Saturday, 7/18, 11 am–4:30 pm  
Carrie Di Costanzo | Online | 221BIL219O

**PLUMS IN DRY BRUSH WATERCOLOR**
Saturday, 8/28, 11 am–4:30 pm  
Carrie Di Costanzo | Online | 221BIL238O

**RED BARLETT PEARS IN DRY BRUSH WATERCOLOR**
Sunday, 9/19, 11 am–4:30 pm  
Carrie Di Costanzo | Online | 221BIL246O

Registration fee for each section: $125/$135

**CERTIFICATE CLASSES**
Open to Non-Certificate students

**BOTANICAL DRAWING I: METHODS AND MATERIALS**
Accurate observation translates into sensitive, realistic drawings and is an essential skill for botanical artists. Using basic shapes, fruit, and leaves, learn contour drawing with an emphasis on proportion, and explore techniques such as foreshortening, perspective, and line weight.  
$435/$479 | Certificate Requirement

6 Thursdays, 5/6–6/10, 6–9 pm  
Linda M. Nemergut | Online | 214BIL301AO

6 Saturdays, 6/18–7/2, 10 am–1 pm  
Scott Rawlins | Online | 221BIL301BO

6 Saturdays, 9/18–10/12, 11 am–2 pm  
Linda M. Nemergut | Online | 221BIL301CO

**BOTANICAL DRAWING II: DEVELOPING YOUR SKILLS**
Learn to tone fruit, vegetables, leaves, and branches. Focus on concepts of light source, value, and shading to create form. Translate color into black and white, and create the illusion of depth and space in your work.  
$435/$479 | Certificate Requirement

6 Tuesdays, 6/8–7/13, 11 am–2 pm  
Laura Vogel | Online | 214BIL302AO

6 Saturdays, 9/25–10/9, 11 am–2 pm  
Linda M. Nemergut | Online | 221BIL302BO

**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.  
$435/$479 | Certificate Requirement

8 Saturdays, 5/1–6/26, 11 am–2 pm  
Rose Marie James | Online | 214BIL331AO

8 Wednesdays, 9/22–11/17 (no class 10/13), 6–9 pm  
Susan Sapanara | Online | 221BIL331BO

**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.  
$435/$479 | Certificate Elective

6 Saturdays, 8/7–9/18 (no class 9/4), 11 am–2 pm  
Rose Marie James | Online | 221BIL332O

**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.  
$435/$479 | Certificate Requirement

6 Tuesdays, 6/1–7/6, 6–9 pm  
Jeanne Reiner | Online | 214BIL415AO

6 Saturdays, 9/18–10/30 (no class 10/9), 11 am–2 pm  
Laura Vogel | Online | 221BIL415BO

**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.  
$495/$545 | Certificate Requirement

8 Wednesdays, 6/2–7/21, 10 am–12:30 pm  
Dick Rauh | Online | 214BIL300O

INSTRUCTOR BIOS CAN BE FOUND ONLINE AT NYBG.ORG/ADULTED
NEW! 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.  
**Prerequisite:** Certificate Requirement

**Botanical Drawing II** | $435/$479  
6 Fridays, 7/9–8/13, 11 am–2 pm  
Carol Ann Morley | Online | 214BIL400O

THE BASICS OF VISUAL COMPOSITION
Forethought and an understanding of basic composition principles are the foundation of any balanced work of art. Through group critiques, discussions and a variety of exercises, we'll experiment with a wide range of principles, including focal point, the rule of thirds, value, and negative space that will help your artwork achieve maximum visual impact. This class is best taken early in your Certificate program.  
**Prerequisite:** Certificate Requirement

**Drawing II**  
Thursday–Friday, 4/22–4/23, 9:30 am–3:30 pm  
Dick Rauh & Carol Woodin | 221BIL419O | Online

**Prerequisite:** 

NEW! SPRING FLOWERS IN COLORED PENCIL AND WATERCOLOR
Revel in spring while learning how to layer watercolor, colored pencil, and watercolor pencil to create rich color, detail, and form. You’ll experiment with a dynamic blend of botanical drawing and painting techniques while focusing on the structure of spring flowers in bloom.  
**Prerequisite:** Botanical Drawing I | $395/$435  
4 Mondays, 4/22–4/29, 11 am–2 pm  
Wendy Hollender | Online | 214BIL405O

**NEW! INSECTS IN COLORED PENCIL**
Study how to properly illustrate insect anatomy using colored pencil. Guided by Jeanne Reiner’s skillful demonstrations, you will practice capturing the translucence, iridescence, textures, and patterns unique to different species of beetles and bees.  
**Prerequisite:** Colored Pencil $285/$315  
4 Fridays, 5/7–5/28, 11 am–2 pm  
Jeanne Reiner | Online | 214BIL439O

NEW! PAINTING AND DRAWING OWLS
Develop observational skills, an eye for detail and proportion, and a basic knowledge of anatomy to create lively, accurate images of these elusive birds. We’ll work primarily from photographs to learn the brush and mixing techniques necessary to capture their colors, plumage patterns, and textures. Tips for sketching in the field will also be shared.  
**Prerequisite:** Botanical Drawing I and some experience with watercolor | $285/$315  
4 Mondays, 6/7–6/28, 11 am–2 pm  
Mary Christiansen | Online | 214BIL422O

NEW! EGG TEMPERA TECHNIQUES
Join us for an introduction to the centuries-old painting methods using egg tempera. We will cover mixing pigments, brush-stroke techniques, scrambling, and glazing. You’ll learn how to bring these together to achieve an ethereal quality in your botanical painting.  
**Prerequisite:** Botanical Drawing II | $225/$249  
Saturday & Sunday, 8/7 & 8/8, 11 am–4:30 pm  
Carrie Di Costanzo | Online | 221BIL366O

REFINED GRAPHITE RENDERING
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 tortillons and graphite dust will result in drawings that minimize the evidence of the medium—that is, achieve the appearance of fully-realized renderings.  
**Prerequisite:** Botanical Drawing II | $295/$325  
3 Sundays, 8/15–8/29, 11 am–4:30 pm  
Scott Rawlins | Online | 221BIL370O

NEW! INTRODUCTION TO GOUACHE: PAINTING MAGNOLIA LEAVES
Practice using gouache to create the details, colors, and shine of magnolia leaves. First, you will transfer a line drawing provided by the instructor to watercolor paper. Next, you’ll learn to apply the gouache in a manner similar to watercolor for the first few layers of color with a fair amount of water. Then, you will transition to dry brush and use the paint in a more semi-opaque form to create rich, matte effects.  
**Prerequisite:** Watercolor I | $125/$135  
Saturday, 4/24, 11 am–4:30 pm  
Carrie Di Costanzo | Online | 214BIL419O

NEW! BOTANICAL ART & ILLUSTRATION
Study how to properly illustrate insect anatomy using colored pencil. Guided by Jeanne Reiner’s skillful demonstrations, you will practice capturing the translucence, iridescence, textures, and patterns unique to different species of beetles and bees.  
**Prerequisite:** Colored Pencil | $285/$315  
4 Fridays, 5/7–5/28, 11 am–2 pm  
Jeanne Reiner | Online | 214BIL439O

NEW! EGG TEMPERA TECHNIQUES
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3 Sundays, 8/15–8/29, 11 am–4:30 pm  
Scott Rawlins | Online | 221BIL370O
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.

Radishes, *Raphanus raphanistrum* subsp. *sativus* (detail), Watercolor on paper, ©Sengmany Phommachakr

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, fungal, and algae 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.
CERTIFICATE REQUIREMENTS

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<td>Dendrology: Woody Plant Identification</td>
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<td>Herbaceous Plant Identification</td>
<td>BOT 376</td>
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<td>One of the four Native Flora courses:</td>
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<td>Native Flora in Summer</td>
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Elective Credits (See current electives below) 58
TOTAL REQUIRED HOURS 169

ELECTIVES

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<tr>
<td>Summer Mushrooms</td>
<td>BOT 356</td>
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<tr>
<td>The Science of Tree Communication</td>
<td>BOT 385</td>
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<td>Pressing Plants For Art &amp; Science</td>
<td>BOT 338</td>
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<td>Psychedelic Mushrooms</td>
<td>BOT 302</td>
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*Course hours do not include exam hours
**Courses offered in the Fall–Winter Catalog
P Courses with a prerequisite before you can register

QUESTIONS? CONTACT PROGRAM COORDINATOR
JAMIE BOYER, PH.D., AT JBOYER@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

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<td>3 Tuesdays, 4/6–4/20</td>
<td>5:30–7:30 pm</td>
<td>Clara Holmes</td>
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<td>3 Tuesdays 9/14–9/28</td>
<td>5:30–7:30 pm</td>
<td>Clara Holmes</td>
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NATIVE FLORA IN SPRING
Follow the bloom sequence of a wide variety of spring wildflowers, shrubs and trees. Learn to identify native plants using taxonomic keys and family characteristics. You’ll practice these skills using a 10X hand lens during walks in the Garden. P Prerequisite: Basic Plant ID or Plant Structure. Blended class: online and on-site. | $295/$325 Certificate Requirement

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<tr>
<td>5 Sundays, 4/11–5/16</td>
<td>9 am</td>
<td>Nancy Slowik</td>
<td>NYBG &amp; Online</td>
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<tr>
<td>5 Wednesdays, 4/21–5/19</td>
<td>9 am</td>
<td>Nancy Slowik</td>
<td>NYBG &amp; Online</td>
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SPRING MUSHROOMS
Discover how and where to hunt for Oysters, Inky Caps, Wine Caps, Dryad’s Saddle, Reishi, and the early spring Chicken Mushroom. Learn to correctly identify mushrooms, differentiate them from look-alikes, and cook or preserve them. Blended class: online and in the field. | $145/$159 Certificate Elective

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<tr>
<td>2 Thursdays, 4/15 &amp; 4/22</td>
<td>10 am–1 pm</td>
<td>Paul Sadowski</td>
<td>Off-site &amp; Online</td>
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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

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<tr>
<td>5 Saturdays, 4/24–5/22</td>
<td>9:30 am</td>
<td>Stephanie Schmiege</td>
<td>NYBG &amp; Online</td>
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<tr>
<td>5 Wednesdays, 7/7–8/4</td>
<td>5:30 pm</td>
<td>Stephanie Schmiege</td>
<td>NYBG &amp; Online</td>
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PSYCHEDELIC MUSHROOMS
Food journalist and former president of the New York Mycological Society, Eugenia Bone, author of Mycophilia, will discuss the biology of these potent fungi, their cultural history, and contemporary use and regulation in the U.S. $59/$65 Certificate Elective

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<td>Friday, 4/30</td>
<td>6–8 pm</td>
<td>Eugenia Bone</td>
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<td>Monday, 6/28</td>
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<td>Thursday, 8/26</td>
<td>10:30 am–12:30 pm</td>
<td>Eugenia Bone</td>
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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

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<td>5 Tuesdays, 5/4–6/1</td>
<td>10:30 am–12:30 pm</td>
<td>Jennifer Bakshi</td>
<td>Online</td>
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<tr>
<td>5 Fridays, 9/24–10/22</td>
<td>10:30–12:30 pm</td>
<td>Jennifer Bakshi</td>
<td>Online</td>
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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). | $125/$139 Certificate Elective

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<tr>
<td>3 Wednesdays, 5/5–5/19</td>
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<td>Giselle Herrera</td>
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<tr>
<td>3 Tuesdays, 7/13–7/27</td>
<td>6–8 pm</td>
<td>Steve Kutos</td>
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<tr>
<td>3 Sundays, 9/19–10/3</td>
<td>10 am–12 pm</td>
<td>Giselle Herrera</td>
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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 Elective

8 Mondays, 4/19–6/14 (no class 5/31), 5–8 pm
Jamie Boyer, Ph.D. | Online | 214BOT317O

DENDROLOGY: WOODY PLANT IDENTIFICATION
Learn to identify the native and naturalized trees, shrubs, and woody vines of the Northeast by their vegetative characteristics using their scientific and common names. You’ll also hone your ability to use taxonomic keys and field guides. Blended class: online and on-site. Prerequisite: Basic Plant ID or Plant Structure \( $379/$415 \) Certificate Requirement

4 Thursdays, 4/22–5/13, 6–8 pm & 3 Sundays, 4/25–5/16 (no class 5/9), 10:30 am–1 pm
James Kaechele | NYBG & Online | 214BOT375ABL

ETHN BOTANY: 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, 4/26–5/10, 5:15–7 pm
Michael Balick, Ph.D. | Online | 214BOT344O

HERBACEOUS PLANT IDENTIFICATION
Study the characteristics that are fundamental to herbaceous plant identification. We will focus on broad-leaved plants rather than grasses, sedges, and rushes. Blended class: online and on-site. Prerequisite: Basic Plant ID or Plant Structure \( $355/$395 \) Certificate Requirement

6 Saturdays, 5/8–6/19 (no class 5/29), 9–11:30 am
Clara Holmes | NYBG & Online | 214BOT376BL

MORPHOLOGY OF FLOWERING PLANTS
Examine the form and structure of angiosperms (flowering plants) with a focus on their flowers, fruits, and vegetative plant parts. We will also study how and why these structures developed. Prerequisite: Plant Structure \( $395/$435 \) Certificate Elective

8 Wednesdays, 5/19–7/7, 10 am–12 pm
Regina Alvarez | Online | 214BOT431O

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, 5/15 & 5/22, 10 am–12 pm
Andrea Candee | Online | 214BOT346AO

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 basic-level chemistry required to understand the world of plants. \( $559/$615 \) Certificate Requirement

8 Thursdays, 6/3–7/22, 6–9 pm
Jasmin Alim | Online | 214BOT315AO
8 Wednesdays, 9/22–11/10, 10 am–1 pm
Steve Kutos | Online | 221BOT315PO

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. \( $59/$65 \)

Saturday, 6/5, 2–4 pm
James Kaechele | Online | 214BOT223AO
Saturday, 8/6, 2–4 pm
James Kaechele | Online | 221BOT223BO

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. Prerequisite: Basic Plant ID or Plant Structure \( $295/$325 \) Certificate Elective

6 Mondays, 7/12–8/16, 5–7 pm
Jamie Boyer, Ph.D. | Online | 221BOT434O

NEW! SUMMER MUSHROOMS
Chanterelles, Milk Caps, Black Trumpets, Boletes of all kinds, and many other choice edibles make their appearance in the steamy summer months. Learn how to sort through this abundance with hands-on techniques and observations. Blended class: online and on-site. \( $145/$159 \) Certificate Elective

2 Thursdays, 8/5 & 8/12, 10 am †
Paul Sadowski | Off-site & Online | 221BOT356BL

NATIVE FLORA IN AUTUMN
In autumn our native Northeast flora can be spectacular, but difficult to identify. With a 10X 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 Requirement

5 Saturdays, 9/18–10/23, (Rain date 10/30), 9 am †
Nancy Slowik | NYBG & Online | 221BOT331ABL

5 Thursdays, 9/23–10/21, (Rain date 10/28), 9 am †
Nancy Slowik | NYBG & Online | 221BOT331BL

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

Let Mother Nature be your muse—use botanicals to create ink, prints, fabrics, and more!

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

Sunday, 4/18, 10 am–12 pm
Christopher Satch | Online | 214CRF275O

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

Saturday, 4/10, 12–2 pm
Jenny Kroik | Online | 214CRF277AO

Thursday, 6/17, 6:30–8:30 pm
Jenny Kroik | Online | 214CRF277BO

Thursday, 8/12, 6:30–8:30 pm
Jenny Kroik | Online | 221CRF277CO

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. | $75/$85

Sunday, 4/25, 11 am–2 pm
Jessica Maffia | Online | 214CRF278O

TURNING FLOWERS INTO ART
Bring the beauty of dried flowers into your home. In the first session, discover which flowers last the longest, how to gather, press, and preserve them, and when to use which materials, such as glycerin and silica gel. Then, using the flowers you’ve dried, paint them to print with, hammer them onto watercolor paper for an embossed look, or press them directly on paper. | $85/$95

2 Saturdays, 5/8 & 5/22, 2–4 pm
Madeline Yanni | Online | 214CRF237AO

2 Sundays, 9/12 & 9/26, 2–4 pm
Madeline Yanni | Online | 221CRF237BO

WILLOW BASKETRY
Hand-woven willow baskets bring a touch of rustic yet elegant beauty to your home. Jesica Clark, owner of the Hudson Valley’s Willow Vale Farm, will teach you the traditional willow weaving techniques of rib basketry. Students will weave one large leaf-shaped tray or two smaller ones to hold and display almost anything. Strong hands are a must! Outside only; rain or shine. | $175/$189

Friday, 5/21, 12–4 pm
Jesica Clark | NYBG | 214CRF285

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. | $75/$85

Sunday, 5/23, 11 am–2 pm
Jessica Maffia | Online | 214CRF259O

Intermediate Botanical Embroidery
INTRODUCTION TO STACKED FOCUS PHOTOGRAPHY
Explore how focus stacking allows photographers to create images of extraordinary depth, sharpness, and detail. This technique is achieved using digital software to combine many images taken of the same subject at different focal lengths. In this introduction, you will learn about the equipment and software you need, see a demonstration of the techniques used, and view images whose botanical details are so vibrant you would think the plants were in your hands. Equipped with this information, you’ll be able to easily get started on your own. | $45/$49

Monday, 5/17, 6:30–8:30 pm
Jeffrey Falk | Online | 214GWP276AO

Thursday, 7/15, 6:30–8:30 pm
Jeffrey Falk | Online | 221GWP276O

NEW! MAKE INK: A FORAGER’S GUIDE
Gather plants and urban detritus (like rust!) from the surrounding landscape to make beautiful dyes—bright magenta pokeweed, dark black walnut, and rich purple wild grape. In the first session, artist and founder of the Toronto Ink Company Jason Logan will teach you which organic and non-organic materials work best and where to look for them. In the second session, you’ll mix, test, and transform what you’ve foraged into rich, vibrant inks using simple household ingredients. | $85/$95

2 Saturdays, 8/14 & 8/21, 11 am–1 pm
Jason Logan | Online | 221CRF187O

NEW! VEGAN JAMS FOR CRAFT COCKTAILS
Join Trade Street Jam Co. founder and chef Ashley Rouse as she shares her process of crafting healthy, fruit-forward vegan jams in unexpected flavors. Ashley will provide an overview of flavor pairings, the cooking and canning process, and the many culinary uses of jam. Then, she will demonstrate how to make Raspberry Jalapeno vegan jam that you can use in a refreshing cocktail recipe fit for springtime. | $59/$65

Thursday, 4/1, 6–8 pm
Ashley Rouse | Online | 214CKG234O

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, 4/19, 6:30–8 pm
Cheryl Paswater | Online | 214CGK241AO

Wednesday, 6/23, 6:30–8 pm
Cheryl Paswater | Online | 214CGK241BO

NEW! KUSUDAMA ORIGAMI
One of three styles of origami, kusudama was inspired by the patterns made from herbs and flowers in Japanese medicine balls. Experience the meditative quality of this simple yet intricate art as you connect multiple versions of the same shape of folded paper into a recognizable pattern. Create a kusudama model, then experiment with designing other abstract forms. | $45/$49

Wednesday, 6/23, 11 am–1 pm
Jeffrey Raab | Online | 214CRF222AO

Thursday, 8/12, 11 am–1 pm
Frank Ling | Online | 221CRF222BO

LIGHT, SHADOW, AND THE GOLDEN HOUR
Light fundamentally influences the mood and composition of your photos. Explore how to make the best use of different kinds of natural light by optimizing your camera settings, consciously choosing what time of day you shoot, and using shadows, a fill light, or a reflector. We’ll take pictures on the grounds and then discuss the results. All levels welcome. Blended class: online and on-site. | $75/$85

1 Tuesday, 9/14, 6:30–8 pm & 1 Saturday, 9/18 (rain date 9/25), 5–7 pm
David Samuel Stern | NYBG & Online | 221GWP238BL
Summer Edible Plants

THE KITCHEN MYCOLOGIST
Become a better mushroom cook by learning how basic mycology (the study of fungi) can inform the ways you select, store, and prepare mushrooms. We’ll also discuss how fungi can spoil and improve foods, the biologic reason why mushrooms taste differently, and the impact of endophytic fungi and mycorrhizal networks on food crops. | $45/$49

Thursday, 4/29, 6–8 pm
Eugenia Bone | Online | 214CKG230AO
Saturday, 7/31, 11 am–1 pm
Eugenia Bone | Online | 214CKG230BO

NEW! SPRING EDIBLE PLANTS
Accompany wild foods author and forager Marie Viljoen on a mid-spring stroll through the Garden to identify a host of edible flowers and plants and discover their culinary and mycology potential. We’ll cover how to forage sustainably using ramps as a case study, as well as how to grow vulnerable native edibles at home. Outside only; rain or shine. | $59/$65

Tuesday, 5/11, 11 am–2 pm
Marie Viljoen | NYBG | 214CKG245

BEEKEEPING BASICS
Expert beekeepers Frank Mortimer and Bob Slanzi walk you through the ins and outs of what’s needed to safely, productively, and enjoyably begin to keep honeybees in a populated area. You’ll learn how and why a beehive functions as one living organism, as well as the practicalities of how to manage a colony and begin to produce honey. Outside only; rain or shine. | $59/$65

Saturday, 5/22, 9:30 am–12:30 pm
Frank Mortimer & Bob Slanzi | NYBG | 214CKG206

GROW GOURMET MUSHROOMS INDOORS
Learn to cultivate gourmet mushrooms at home using safe and simple techniques with John Michelotti, owner of Catskill Fungi. Using cardboard and coffee grounds, you will create your own oyster mushroom starter (Pleurotus ostreatus) at home, while learning about the life cycles, characteristics, and medicinal and culinary properties of fungi. | $75/$85

Wednesday, 6/2, 6:15–8:15 pm
John Michelotti | Online | 214CKG207AO
Monday, 8/30, 10 am–12 pm
John Michelotti | Online | 221CKG207BO

SEASONAL BERRY JAM
Trained in preservation techniques at Cornell, Stephen Nocera will demonstrate three distinct methods of jamming—using reduced sugar, using pectin, and without additives or pectin. You’ll come away with the techniques and recipes you need to keep jamming at home. | $49/$55

Saturday, 6/12, 11 am–1 pm
Stephen Nocera | Online | 214CKG200AO
Sunday, 7/25, 11 am–1 pm
Stephen Nocera | Online | 221CKG200BO

BOTANICAL MIXOLOGY 101
Go beyond the garnish into a world of oleosaccharums, infusions, simple syrups, and tinctures using plants and ingredients accessible to the urban gardener. You’ll learn history, get growing advice, and master techniques to broaden your palette of flavors. | $45/$49

Tuesday, 7/13, 6–9 pm
Jim Freeman | Online | 221CKG240O

CANNING PEACHES
“Put up” your peaches using time-honored canning techniques for three preparations that will extend the bounty of your favorite stone fruits long after summer is gone. Create a compote to top your summer desserts; prepare for fall with warming spices; or add syrup to bring sunshine to your winter days. We’ll also discuss the basics of canning and food safety. | $45/$49

Saturday, 7/24, 11 am–1 pm
Stephen Nocera | Online | 221CKG231O

PRESERVING MUSHROOMS
When the Eastern Woodlands erupt with marvelous edible mushrooms, the picking is great. But too often, the harvest succumbs to rot in your kitchen. In this illustrated talk, master canner and author of Mycophilia Eugenia Bone explains the best ways to dry, freeze, pressure can, preserve in oil, and pickle both wild and cultivated mushrooms so you can savor your fungi in any season! | $59/$65

Saturday, 8/7, 11 am–1 pm
Eugenia Bone | Online | 221CKG246O

TOTAL TOMATO
Wondering what to do with your bounty of tomatoes? Preserve them, of course! We will show you the best ways to process and hot pack your harvest, with a simple method borrowed from industrial canning. We’ll show how to make a chili tomato salsa, marinara sauce, and crushed tomatoes for the pantry, all of which can be safely preserved for future use. | $45/$49

Sunday, 8/29, 11 am–2 pm
Stephen Nocera | Online | 221CKG226O
Floral Design

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 each individual course description on our website for a list of hard goods (containers, tools, etc.) you must purchase or have on hand before class.
CERTIFICATE REQUIREMENTS

Certificate students must complete 142 total course hours (116 required and 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.

Course Code Hours Page
Fundamentals of Form FDN 300 16 17
Fundamentals of Style FDN 302  P 16 17
Wedding Design I: Personals FDN 304  P 18 17
Color Theory for Floral Design FDN 306 7.5 17
Flower ID from A to Z FDN 308 7.5 17
Interior Plantscapes FDN 310 8 17
Shopping the New York Flower Market** FDN 400 4 —
Modern Sympathy Design FDN 382  P 6 17
Wedding Design II: Ceremony & Reception FDN 305  P 16 17
Grand-Scale Arrangements FDN 502  P 8 17
Event Planning for the Floral Designer FDN 504  P 12 17
Elective courses 26
TOTAL REQUIRED HOURS 145

ELECTIVES

Course Code Hours Page
Prop Styling with Botanicals FDN 312 2 16
Farm to Table: Spring Bulb Centerpiece FDN 348 2 15
Late-Spring Splendor FDN 309 3 15
Pink Peonies: Tabletop Design FDN 356 3 16
Wild Wetlands FDN 358 3 16
Antique Roses & Ferns: A Modern Take FDN 387 3 16
Boho Bouquet with the Egg Floral Cage FDN 313 2.5 16
Exploring Tablescapes: Floral Runners FDN 362 4 16
**Course offered in the Fall–Winter Catalog

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 guidance from your instructor. Watch your fellow students’ efforts 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

Thursday, 4/15, 6–8 pm | Rose G. Edinger | Online | 214FDN243A
Monday, 5/17, 6–8 pm | Nsombi Woodson | Online | 214FDN243B
Monday, 6/21, 6–8 pm | Nsombi Woodson | Online | 214FDN243C
Monday, 7/12, 6–8 pm | Nsombi Woodson | Online | 221FDN243D
Wednesday, 8/4, 6–8 pm | Rose G. Edinger | Online | 221FDN243E
Tuesday, 9/14, 6–8 pm | Nsombi Woodson | Online | 221FDN243F

NEW! FARM TO TABLE: SPRING BULB CENTERPIECE

Style a glorious spring centerpiece bursting with sweet hyacinths, daffodils, and ruffled parrot tulips. Discover where to source the best flowers and how to artfully add organic vegetables and herbs to your arrangement. You will leave with a fresh farm-to-table design set in a rectangular wooden container that is tabletop ready. Students will source flowers per instructor guidelines. $75/$85 Certificate Elective

Tuesday, 4/20, 10 am–12:30 pm | Trish O’Sullivan | Online | 214FDN348O

NEW! LATE-SPRING SPLENDOR

Late spring ushers in a bounty of blooms. Use the bounty of the season to create a lush, verdant arrangement that includes flowering branches, an array of perennial flowers, and late-flowering bulbs. $170 materials fee. $75/$85 Certificate Elective

Sunday, 5/2, 11 am–2 pm | Joshua Werber | Online | 214FDN309O
Successful floral design depends on mastering a variety of techniques to anchor and style flowers into the vessel of an arrangement. Learn how different tools—floral pin frogs (kenzans), aluminum wire, and nature’s own branches—can be used to achieve unique shapes, without the use of floral foam. Take one or sign up for all three!

**FLORAL PIN FROG**
Study the ins and outs of using pin frogs to secure a variety of flowers within an arrangement to create a sense of movement and openness.
Wednesday, 4/7, 6–8 pm
Rose G. Edinger | Online | 214FDN445BO

**ALUMINUM WIRE**
Learn how to properly manipulate aluminum craft wire (16 gauge) to create a supportive metal framework for contemporary arrangements.
Wednesday, 4/28, 6–8 pm
Rose G. Edinger | Online | 214FDN446O

**BRANCHES**
Discover which branches work best, and practice properly placing them to achieve the desired height and fullness in your design.
Wednesday, 5/19, 6–8 pm
Rose G. Edinger | Online | 214FDN4470

Registration fee for each section: $55/$59
All Three Sections: $145/$159 | 214FDN452BO

Students will source flowers per instructor guidelines.

**NEW!** **BOHO BOUQUET WITH THE EGG FLORAL CAGE**
The elegant Boho bridal bouquet continues to be on trend. Learn to design an asymmetrical array of blossoms accented by at least three different types of greenery using an egg cage, a technique popularized by Holly Heider Chapple as an alternative to floral foam. Students will source flowers per instructor guidelines. | $75/$85 Certificate Elective

Wednesday, 5/12, 10 am–12:30 pm
Nsombi Woodson | Online | 214FDN313O

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

Saturday, 6/5, 11 am–1 pm
Robin Zachary | Online | 214FDN312AO

Saturday, 8/7, 11 am–1 pm
Robin Zachary | Online | 221FDN312BO

**NEW!** **WILD WETLANDS**
Spare, striking wetland flora create dramatic and unconventional arrangements that evoke these marshy environments. Study line and negative space as you create a large-scale arrangement using reeds, grasses, and other wetland plants such as Irises, Cattails, and Water Lilies. $170 materials fee. | $75/$85 Certificate Elective

Sunday, 6/6, 11 am–2 pm
Joshua Werber | Online | 214FDN358O

**NEW!** **PINK PEONIES: TABLETOP DESIGN**
With gorgeous pink palettes and intoxicating fragrance, peonies are the favorite blossoms of floral designers and enthusiasts. Learn how to select complementary shades and vases to offset their soft beauty. Then, finish your creation by adding textural grey floral and botanical elements for a centerpiece with a clean, monochromatic look. Students will source flowers per instructor guidelines. | $75/$85 Certificate Elective

Tuesdays, 6/15, 10 am–12:30 pm
Trish O’Sullivan | Online | 214FDN343O

**NEW!** **ANTIQUE ROSES & FERNS: A MODERN TAKE**
Take creative inspiration from 19th- and 20th-century English gardens blooming with delicate roses such as Amnesia, Quicksand, and Early Grey. Step-by-step, learn easy techniques for crafting an opulent tabletop from a bygone era. Our choice of container—faux mercury glass-footed compote bowls and fern-covered glass hurricane vases—is the key element that turns Victorian style into modern design. Students will source flowers per instructor guidelines. | $75/$85 Certificate Elective

Thursday, 7/8, 10 am–12:30 pm
Trish O’Sullivan | Online | 221FDN387O

**EXPLORING TABLESCAPES: FLORAL RUNNERS**
Use color theory, repetition, and rhythm to create a cohesive blooming centerpiece that spans the length of a wedding table, mantel, or buffet. We will practice designing these accent pieces in segments for easy transport. $175 materials fee. | $115/$125 Certificate Elective

Thursday, 8/19, 10 am–2 pm
Nsombi Woodson | Online | 221FDN362O

Illustration: *Cornus florida* (detail), ©Margaret Farr
CERTIFICATE REQUIREMENTS
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. $395/$435 Certificate Requirement

- Wednesday–Friday, 5/26–5/28, 10 am–4 pm
  Thomas Cawley | Online | 214FDN300AO
- Wednesday–Friday, 7/28–7/30, 10 am–4 pm
  Thomas Cawley | Online | 221FDN300AO
- Wednesday–Friday, 9/22–9/24, 10 am–4 pm
  Thomas Cawley | Online | 221FDN300CO

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. Prerequisite: Fundamentals of Form | $395/$435 Certificate Requirement

- Wednesday–Friday, 4/6–4/8, 10 am–4 pm
  Nsombi Woodson | Online | 214FDN302AO
- Wednesday–Friday, 7/21–7/23, 10 am–4 pm
  Nsombi Woodson | Online | 221FDN302AO
- Wednesday–Friday, 9/29–10/1, 10 am–4 pm
  Nsombi Woodson | Online | 221FDN302BO

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. Prerequisite: Fundamentals of Style | $395/$435 Certificate Requirement

- Wednesday–Friday, 4/14–4/16, 10 am–4 pm
  Thomas Cawley | Online | 214FDN304AO
- Wednesday–Friday, 7/28–7/30, 10 am–4 pm
  Thomas Cawley | Online | 221FDN304AO
- Wednesday–Friday, 10/13–10/15, 10 am–4 pm
  Thomas Cawley | Online | 222FDN304BO

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. Students will source flowers per instructor guidelines. $195/$215 Certificate Requirement

- Monday, 4/12–4/26, 6–8:30 pm
  Rose G. Edinger | Online | 214FDN306AO
- Monday, 7/19–7/23, 6–8:30 pm
  Rose G. Edinger | Online | 214FDN306BO
- Monday, 10/18–10/22, 6–8:30 pm
  Rose G. Edinger | Online | 222FDN306BO

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 Certificate Requirement

- Wednesday, 6/9–6/30, 10 am–12 pm
  Chris Raimondi, CLP | Online | 214FDN310

MODERN SYMPATHY DESIGNS
Sympathy arrangements, properly composed, pay tribute to a departed loved one and offer solace to the grieving. Study what details must be discussed with a bereaved family, special etiquette to be observed, and how to determine which designs will make a touching statement of final tribute. Construction and mechanic of funeral baskets and casket sprays associated with a diversity of cultural traditions are emphasized. $200 materials fee. Prerequisite: Fundamentals of Style | $179/$195 Certificate Requirement

- Thursday & Friday, 4/22 & 4/23, 10 am–1 pm
  Ken Norman | Online | 214FDN382O

WEDDING DESIGN II: CEREMONY & RECEPTION
Design and create arrangements appropriate for the ceremony, season, and setting, including aisle and altar designs, pew arrangements, and banquet table centerpieces. Work with a remarkable array of flowers, foliage, and fabrics to create captivating garlands and columns. Discussions include a variety of ceremonial styles, including chuppahs, in both outdoor and indoor venues. Blended class: online and on-site. $245 materials fee. Prerequisite: Wedding Design | $395/$435 Certificate Requirement

- Wednesday–Friday, 4/28–4/30 (Rain date 5/1), 10 am–4 pm
  Thomas Cawley | NYBG & Online | 214FDN305BL

EVENT PLANNING FOR THE FLORAL DESIGNER
In addition to exquisite design, a successful event requires a well-conceived plan. Learn how to write a sales proposal based on cost analysis, finalize the terms of the design contract, and order and organize materials, personnel, and deliveries, all within a specified budget and time line. We will discuss how to stage decor for large-scale event arrangements, design cocktail receptions, and develop formal and informal tablescape. Blended class: online and on-site. $185 materials fee. Prerequisite: Wedding | $285/$315 Certificate Requirement

- Tuesday–Thursday, 5/18–5/20 (Rain date 5/21), 10 am
  Thomas Cawley | NYBG & Online | 214FDN504BL

GRAND-SCALE ARRANGEMENTS
Full, lavish arrangements to enhance entrance halls, ballrooms, parties, and hotels are always in demand. Learn the mechanics behind how these dramatic arrangements are designed and constructed. $375 materials fee. Prerequisite: Fundamentals of Style | $229/$255 Certificate Requirement

- Thursday & Friday, 6/24 & 6/25, 10 am–2:30 pm
  Nsombi Woodson | Online | 214FDN502O

FLORAL DESIGN | 17
REGISTER ONLINE AT NYBG.ORG/ADULTED OR CALL 718.817.8720
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.

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.

Ethiopian Limu Coffee, *Coffee arabica* (detail), Watercolor on paper, ©Sarah Howard
### CERTIFICATE REQUIREMENTS

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**Elective GAR or HRT courses**

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**TOTAL REQUIRED HOURS**

187

- Courses with a prerequisite before you can register
- **Course offered in the Fall–Winter Catalog**

For professional organizations, see p. 39.

### ELECTIVES

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**QUESTIONS? CONTACT PROGRAM COORDINATOR**

DARYL BEYERS AT GARCOORDINATOR@NYBG.ORG

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**ONLINE INTENSIVE PROGRAM**

Fast-track your NYBG Gardening Certificate this season! In just eight weeks complete 40% of all course work required for the Certificate and gain a solid base in the principles of environmentally sound gardening. All classes will be held online with the exception of Plants for Landscaping, which will meet several times outdoors on NYBG's 250 magnificent acres. This year, choose either our spring or summer option.

**THE CLASSES**

- Fundamentals of Gardening
- Soil Science for Gardeners
- Insect Identification and Management
- Plants for Landscaping
- Fundamentals of Garden Design
- Gardening with Native Plants

**TUITION AND REFUNDS**

- $1,495 (Member) / $1,695 (Non-Member)
- A $565 non-refundable deposit is due at registration.
- An optional payment schedule is available if requested.

Questions about the Intensive?

Call 718.817.8720 or email: adulted@nybg.org

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**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. 33 for full list of dates and times.

**BASICS OF PERENNIAL MAINTENANCE**

Learn the basics of successfully cultivating perennials in a variety of garden settings, including site selection, soil preparation, tools, planting techniques, maintenance practices, plant selection, landscape use, and design basics.

$115/125 Certificate Elective

- 3 Mondays, 4/12–4/26, 6–8 pm | Michele Glauber | Online | 214GAR323
- 2 Fridays, 4/23 & 4/30, 10 am–12 pm | Kim Eierman | Online | 214GAR241

**NEW! SPRING-BLOOMING NATIVE PLANTS**

Explore the plethora of spring-blooming perennials and woody plants native to the Northeast, including underutilized gems such as Spring Beauties, Wild Pink, Running Serviceberry, and Azaleas. Study their ecological benefits such as feeding early-emerging pollinators, as well as the cultural requirements of each species.

- $79/$85
- 2 Fridays, 4/23 & 4/30, 10 am–12 pm | Kim Eierman | Online | 214GAR216O

**LANDSCAPE FOR CURB APPEAL**

Make a great first impression by creating a welcoming entry garden for your home. Review examples that work for different architectural styles, and develop plant lists that fit the specific needs of every type of front yard.

- $55/$59
- Sunday, 4/25, 10 am–12 pm | Daryl Beyers | Online | 214GAR326AO
- Saturday, 7/31, 10 am–12 pm | Daryl Beyers | Online | 221GAR326BO

**NEW! SHRUBS: THE BACKBONE OF THE GARDEN**

Transform your garden into a low-maintenance, colorful space by selecting the right shrubs that will bring you pleasure for the entire growing season. We'll discuss the fabulous foliage and minimal upkeep required for new varieties on the market, as well as tried-and-true favorites.

- $55/$59
- Saturday, 4/24, 10 am–12 pm | Lorraine Ballato | Online | 214GAR241O
Get Ready for Spring Vegetable Gardening!

Grow your own veggies and herbs with help from NYBG’s experts. These classes will help you start a vegetable garden, or make the most of the garden you have.

GET MORE FROM YOUR VEGETABLE GARDEN

Learn techniques such as succession and companion planting, stacking, and vertical growing to achieve a steady harvest and enjoy a wide variety of delicious crops. We’ll focus on sustainable practices that help gardeners work with nature. | $55/$59

Sunday, 4/11, 10 am–12 pm
Colin Wright | Online | 214GAR330A

SUPER SMALL SPACE VEGETABLE GARDENING

Whether you have a terrace, rooftop, or tiny backyard, you too can be a successful veggie gardener! Learn how to prepare soil, select containers, design beds, choose crops, and maximize your yield. Get your spring started with smart seed ordering, growing and choosing the right transplants, and strategizing for irrigation, pest management. | $169/$185 Certificate Elective

3 Tuesdays, 4/13–4/27, 6–9 pm
Annie Novak | Online | 214GAR330AO

3 Wednesdays, 6/16–6/30, 6–9 pm
Annie Novak | Online | 214GAR330B

3 Thursdays, 8/5–8/19, 6–9 pm
Annie Novak | Online | 221GAR330C

ROOFTOP GARDENING

From vegetable selection to pest control to composting, learn the basics of rooftop, terrace, and balcony growing, covering both container and green roof garden systems. | $115/$125 Certificate Elective

3 Wednesdays, 4/14–4/28, 6:15–8:15 pm
Annie Novak | Online | 214GAR330BO

3 Tuesdays, 8/17–8/31, 6:15–8:15 pm
Annie Novak | Online | 221GAR330CO

RAISED BED GARDENING

Raised beds make gardening easier and allow you to successfully grow vegetables, herbs, and ornamentals in problem soils and small spaces. Learn the best ways to build raised beds, as well as how to maximize their beauty and productivity. | $55/$59

Sunday, 4/18, 10 am–12 pm
Nick Storrs | Online | 214GAR328O

NEW! INTRO TO HERBS

Herbs are a perennial favorite for backyard, container, rooftop, and apartment gardeners. Medicinal, dye, ornamental, and culinary herbs offer benefits to you as a gardener and to your garden ecosystem. In this introductory course, learn how to set up a successful herb garden or improve your existing plantings, how to select the right seeds and plants for your site, and the basics of cultivation and care. | $115/$125 Certificate Elective

2 Mondays, 4/19 & 4/26, 6–9 pm
Annie Novak | Online | 214GAR333O

MASTERING THE ART OF TOMATO GARDENING

Learn how to plant and care for a healthy, organic tomato garden. In the spring, we’ll focus on selecting the right plants for your space, as well as starting plants from seed, transplanting, and grafting. In the fall, learn to create trellises, manage pests and diseases, devise a fertilizing regimen, and select and store your most successful plants’ seeds. Sign up for one or both! | $69/$75

2 Thursdays, 5/6 & 5/13, 6:15–7:45 pm
Annie Novak | Online | 214GAR143AO

2 Wednesdays, 9/22 & 9/29, 6:15–7:45 pm
Annie Novak | Online | 221GAR143BO

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. | $225/$249 Certificate Elective

3 Thursdays, 8/5–8/19 & Tuesday, 8/10, 9–11 am
Renee Marsh | Online | 221GAR327CO

NEW! SUMMER-BLOOMING NATIVE PLANTS

Discover plants native to our region that flower in summer, such as Hairy Penstemon, Spotted Beebalm, Shrubby St. John’s Wort, and Northern Bush Honeysuckle. Learn how to choose the right plants for your landscape conditions and explore the benefits they provide to your garden’s ecosystem for pollinators, birds, and other wildlife. | $79/$85

2 Mondays, 5/10 & 5/17, 6–8 pm
Kim Eierman | Online | 214GAR321O

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 Wednesdays, 5/19 & 5/26, 10:30 am–12:30 pm
Renee Marsh | Online | 214GAR327AO

2 Saturdays, 7/17 & 7/24, 10:30–12:30 pm
Michael Troy Brown | Online | 221GAR327AO

NEW! DESIGNING WITH SHRUBS

Woody plants are the foundation of every garden plan. Learn how to use evergreens such as Rhododendron and Holly, and deciduous stalwarts such as Hydrangea, Lilac, and Viburnum, in formal or naturalistic schemes, to create year-round beauty and interest in your garden. Blended class: online and on-site. | $79/$85 Certificate Elective

Thursday, 5/20, 6–8 pm & Saturday, 5/22, 10 am–12 pm
Daryl Beyers | NYBG & Online | 214GAR359BL

NEW! THE NATIVE POLLINATOR GARDEN

A successful pollinator garden must provide appropriate food and habitat for a diverse array of species, including bees, butterflies, hummingbirds, birds, and even pollinating flies. Explore best practices for attracting and supporting our native pollinators, as well as which native plants they need. Learn to select the right plant species for particular pollinators, such as Monarda didyma for hummingbirds or Monarda fistulosa for bumble bees. | $79/$85 Certificate Elective

2 Thursdays, 6/3 & 6/10, 10 am–12 pm
Kim Eierman | Online | 214GAR340O
NEW! KNOWING AND GROWING ROSES: AN OVERVIEW

Expert rosarian Shauna Moore walks you through the history of a wide variety of rose types and classifications while explaining how to select the best ones for your garden. On a walk through the Peggy Rockefeller Rose Garden, she’ll share practical tips on how to successfully grow and care for them. **Blended class: online and on-site. $79/$85 Certificate Elective**

2 Sundays, 6/6 & 6/13, 10 am–12 pm
Shauna Moore | NYBG & Online | 214GAR361BL

ORGANIC GARDENING BASICS

Hone your ability to build and maintain soil health, encourage biodiversity, use water and energy responsibly, and avoid chemicals so you can restore, maintain, and enhance ecological harmony in your garden. **$229/$255 Certificate Elective**

4 Wednesdays, 6/16–7/7, 10 am–12 pm
Renee Marsh | Online | 214GAR308O

NEW! GARDENING STRATEGIES FOR CLIMATE CHANGE

Small steps can have big effects. Learn how the plants you choose and the landscape practices you use can help reduce the impacts of climate change and improve the environment around you. **$79/$85 Certificate Elective**

2 Fridays, 6/18 & 6/25, 10 am–12 pm
Kim Eierman | Online | 214GAR379O

HOUSEPLANT DESIGN WORKSHOP

Learn to use principles of repetition, symmetry, and color theory to blend your collection of houseplants into a unified design. We’ll discuss a broad palette of plants, how to mix and match them, and how to select the best pots or shelves to complement your decor. **$79/$85 Certificate Elective**

2 Sundays, 6/20 & 6/27, 10 am–12 pm
Daryl Beyers | Online | 214GAR364AO

2 Thursdays, 8/26 & 9/2, 6–8 pm
Daryl Beyers | Online | 221GAR364BO

NEW! GARDENING WITH FERNS

Delicate and feathery or tall and structural, ferns are the perfect choice to make shady, moist pockets of your garden come alive. In a lushly illustrated talk combined with walks on Garden grounds, Mobee Weinstein—NYBG Foreman of Gardeners for Outdoor Gardens and author of *The Complete Book of Ferns*—will introduce you to the wide variety of fern colors and shapes, their particular moisture and soil requirements, and how best to combine them with other plants. **Blended class: online and on-site. $145/$169 Certificate Elective**

3 Saturdays, 7/10–7/24, 9–11 am
Mobee Weinstein | NYBG & Online | 221GAR348BL

VERTICAL GARDENING: VINES & CLIMBERS

Clematis, wisteria, roses, hardy jasmine, hydrangea, and other climbers provide strong vertical design, create outdoor enclosures, and transform unattractive structures. Learn to select and train the right plant for your space. **Blended class: online and on-site. $79/$85**

2 Sundays, 8/22 & 8/29, 10 am–12 pm
Doris Loechle | NYBG & Online | 221GAR146BL

SHADY CHARACTERS

Move beyond Hosta! Explore the wide variety of plants that thrive in the shade while bringing charm and color. Discover how to turn shady conditions to your advantage, so that you can cherish your shade as the calming treasure it is. **$65/$69**

Saturday, 8/28, 10:30 am–1:30 pm
Lorraine Ballato | Online | 221GAR142O

CERTIFICATE CLASSES

Open to Non-Certificate students

FUNDAMENTALS OF GARDENING

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 Tuesdays, 4/13–5/18, 6–8 pm
Daryl Beyers | Online | 214GAR301AO

6 Mondays, 5/3–6/14, 6–8 pm
Manny Grossman | Online | 214GAR301BO

6 Saturdays, 6/5–7/17 (no class 7/3), 10:30 am–12:30 pm
Jennifer Cappello-Ruggiero | Online 214GAR301CO

6 Mondays, 7/12–8/16, 9–11 am
Daryl Beyers | Online | 221GAR301DO

6 Saturdays, 7/24–8/28, 10 am–12 pm
Jennifer Cappello-Ruggiero | Online 221GAR301EO

6 Thursdays, 8/26–10/7 (no class 9/16), 9:30 am–11:30 am
Renee Marsh | Online | 221GAR301FO

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 Tuesdays, 5/4–6/1, 10:30 am–12:30 pm
Jennifer Bakshi | Online | 214GAR360AO

5 Tuesdays, 6/29–7/27, 6:15–8:15 pm
Jennifer Bakshi | Online | 221GAR360BO

5 Fridays, 9/24–10/22, 10:30 am–12:30 pm
Jennifer Bakshi | Online | 221GAR360CO

LUSH PEONIES

Choosing the right spot to plant your peonies is key to growing large, sumptuous blooms with little to no maintenance. Get tips for planting, cultivating, and propagating this springtime showstopper. **$55/$59**

Sunday, 5/23, 10 am–1 pm
Daniel Furman | Online | 214GAR242O

NEW! THE MAGIC OF REBLOOMING HYDRANGEAS

Discover how to get the best from a large array of hydrangeas that can bloom multiple times. Find out how to make these rebloomers sing with later season color. Hint: Pruning isn’t always the way to improve plant performance. **$55/$59**

Saturday, 8/14, 10 am–12 pm
Lorraine Ballato | Online | 221GAR145O

Garden Varieties: Summer All-Stars

Like a friendship that deepens the more time you spend together, digging deeper into the history and cultivation of a favorite genus can add layers of meaning to why we grow and enjoy the plants we choose.

DAUNTLESS DAHLIAS

Low-maintenance dahlias thrive in our coastal climate. When they bloom in mid-July, their spiky, colorful blossoms brighten up gardens and flower beds across the city. Learn best practices to help your dahlias flourish, including how and when to disbud, stake, water, and much more. **$55/$59**

Saturday, 3/20, 11 am–1 pm
Frances Palmer | Online | 213GAR243O
Spotlight on Orchids

**Phalaenopsis Care**
Myths abound about how hard it is to care for this ever-popular orchid. Dispel them with sensible advice on how to treat your phalaenopsis so it blooms year after year. Light, water, nutrients, repotting, and root care are all key.

$55/$59

Saturday, 4/10, 11 am–1 pm
Christopher Satch | Online | 214GAR213DO

**Desktop Orchids**
Growing orchids indoors comes with its own unique challenges. Explore which orchid genus fares best in your indoor environment, as well as how to ensure your orchids have what they need to grow and bloom.

$55/$59

Saturday, 4/17, 11 am–1 pm
Barbara Schmidt | Online | 214GAR213EO

**New! Native Orchids**
Orchids are most often associated with tropical paradises and exotic climates but these perennial herbs are actually native to every continent, except Antarctica, and every climate, except those that are permanently frozen or dry. Learn where to find native orchid species such as Bletilla, Cypripedium, and Pleione and how to successfully grow them in your own backyard.

$55/$59

Saturday, 5/8, 11 am–1 pm
Barbara Schmidt | Online | 214GAR213FO

**New! Orchids for Beginners**
Though orchids are the most common houseplant in America, many people still feel slightly intimidated by caring for them. Learn the basics! Explore how these beauties grow in nature and what that can teach us about keeping your plants healthy.

$55/$59

Tuesday, 5/18, 6–8 pm
Barbara Schmidt | Online | 214GAR213FO

### 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.

**Blended class: online and on-site.**

$285/$319 Certificate Requirement

5 Tuesdays, 5/18–6/15, 4–7 pm
Don Gabel | NYBG & Online | 214GAR324BL

### 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 I.

**Blended class: online and on-site.**

$285/$315 Certificate Requirement

6 Tuesdays, 5/4–6/22 (no class 5/18 & 5/25), 6–8 pm
David Bulppt | Online | 214GAR302AO

6 Tuesdays, 7/6–8/10, 9–11 am
Manny Grossman | Online | 214GAR302BO

### 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

6 Wednesdays, 5/5–6/9/21, 10 am–12 pm
Stephen Nocera | Online | 214GAR431A

6 Wednesdays, 8/11–9/22 (no class 9/15), 6–8 pm
Stephen Nocera | Online | 214GAR431BO

### Gardening with Native Plants
Learn how native plants enhance gardens and augment biodiversity. Study native herbaceous and woody plants: their identification, habitat, and culture. Discover the significance of woodland soils, and how to promote a healthy environment to support spring ephemerals, summer perennials, shrubs, and trees.

$215/$239 Certificate Requirement

4 Thursdays, 5/6–5/27, 6–8 pm
Kim Eierman | Online | 214GAR315AO

4 Thursdays, 7/8–7/29, 9–11 am
Kim Eierman | Online | 221GAR315BO

3 Fridays, 8/13–8/27, 9:30 am
Kim Eierman | Online | 221GAR315CO

### 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

5 Wednesdays, 6/2–6/30, 4–7 pm
Don Gabel | NYBG & Online | 214GAR320ABL

4 Wednesdays, 7/7–7/28, 9:30 am–12:30 pm
Mark Kokinchk | Online | 221GAR320BO

### 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 Thursdays, 6/3–7/1, 6–8:30 pm
Daryl Beyers | Online | 214GAR342AO

3 Wednesdays & 2 Thursdays, 8/4–8/18, 9–11:30 am
Daryl Beyers | Online | 221GAR342BO

### Complete Garden Care and Maintenance
Learn sustainable garden and landscape maintenance techniques, including planting methods, plant care, and maintenance regimens for trees, shrubs, lawn, and perennial gardens. Discuss site analysis and plant selection, organic gardening practices, and how to create a calendar of landscape and garden tasks.

**Prerequisite: Fundamentals of Gardening**

$445/$489 Certificate Requirement

9 Tuesdays, 5/4 –6/29, 5–7 pm
(Rain dates: Saturdays, 6/5 & 6/26, 10 am–2:30 pm)
Mobee Weinstein | NYBG & Online | 214GAR440BL

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

Illustration: Two Orchids II, Paphiopedilum ‘Doll’s Kobold’, ©Carol Woodin, NYBG Instructor
Online Weekend Gardening Workshops

Vegetable Gardening
3 Saturdays, April 10–24, 9:30–11:30 am
3 Sundays, September 12–26, 9:30–11:30 am

VEGETABLE GARDENING BASICS
Whether you’re a novice or an experienced grower, you’ll get more from your garden this season with these time-tested techniques for site selection and soil preparation. We’ll also discuss optimal planting times and harvesting strategies.

April 10 | Nick Storrs | 214GAR201BO
September 12 | Nick Storrs | 221GAR201FO

PROTECT YOUR PLANTS FROM PESTS
Learn a variety of environmentally friendly and sustainable ways to minimize or eliminate pests in your veggie garden, including promoting beneficial insects that attack bad bugs.

April 17 | Renee Marsh | 214GAR201CO
September 19 | Renee Marsh | 221GAR201GO

SEED STARTING PRIMER
Starting your own seeds allows you to have an earlier harvest. This class covers the basics, including how to choose what seeds to start, as well as the proper location, lighting, containers, watering techniques, and soil mixes to ensure your success.

April 24 | Manny Grossman | 214GAR201DO
September 26 | Manny Grossman | 221GAR201HO

All sections take place online.
Registration fee for each section: $55/$59
All Three Sections: $125/$139
April Series | 214GAR201AO
September Series | 221GAR201EO

All About Containers
3 Saturdays, May 1–15, 9:30–11:30 am
3 Sundays, July 11–25, 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.

May 1 | Daryl Beyers | 214GAR200BO
July 11 | Daryl Beyers | 221GAR200FO

VEGGIES AND HERBS FOR CONTAINERS
Discover which varieties of veggies and herbs do best in containers and how best to care for them. Special attention is paid to those varieties that not only taste great but also look beautiful, including those with interesting or unusual blooms and foliage.

May 8 | Nick Gershberg | 214GAR200CO
July 18 | Nick Gershberg | 221GAR200GO

DESIGNING WITH CONTAINERS
Learn a comprehensive approach to designing with containers, including how, when, where, and why you should use a particular pot in one spot over another. Gain tips and tricks for great plant combinations in containers of all kinds.

May 15 | Renee Marsh | 214GAR200DO
July 25 | Renee Marsh | 221GAR200HO

All sections take place online.
Registration fee for each section: $55/$59
All Three Sections: $125/$139
May Series | 214GAR200AO
July Series | 221GAR200EO

Terrace Gardening
3 Saturdays, June 5–19, 9:30–11:30 am
3 Sundays, August 1–15, 9:30–11:30 am

GREAT PLANTS FOR TERRACE GARDENS
Learn how to select and maintain plants best suited for life on a terrace which presents microclimates that are much different than life on the ground. We’ll cover a wide variety of edibles and ornamentals with textures and colors that offer visual interest year-round.

June 5 | Colin Wright | 214GAR226BO
August 1 | Colin Wright | 221GAR226FO

POTTING MIXES AND PLANT NOURISHMENT
Discover how to create the right blend of ingredients for your container plants. You’ll learn potting mix recipes for different types of plants, and simple secrets for fertilizers, compost, and annual soil refreshers that will help your garden thrive.

June 12 | Daryl Beyers | 214GAR226CO
August 8 | Daryl Beyers | 221GAR226GO

DISEASE AND PEST CONTROL IN POTS
Learn the classic signs of infections and infestations found in urban pots and planters. Get tips on how to properly clean and disinfect your containers, and other measures to control and prevent problems in your terrace garden.

June 19 | Christopher Satch | 214GAR226DO
August 15 | Christopher Satch | 221GAR226HO

All sections take place online.
Registration fee for each section: $55/$59
All Three Sections: $125/$139
June Series | 214GAR226AO
August Series | 221GAR226EO
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.

Black Soybean, *Glycine max* 'Tambaguro', Watercolor on paper, © Akiko Enokido
### Course: CERTIFICATE REQUIREMENTS

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*Course hours do not include exam hours  
**Courses offered in the Fall–Winter Catalog  
***Courses on-hold until indoor classes are possible  
Courses with a prerequisite before you can register  
For professional organizations, see p. 39.

**QUESTIONS? CONTACT PROGRAM COORDINATOR  
CHARLES YURGALEVITCH, PH.D.,  
AT HRTCOORDINATOR@NYBG.ORG

### Course: 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 Wednesdays, 4/21–6/9, 6:30–8:30 pm  
Regina Alvarez | Online | 214HRT300AO

8 Saturdays, 5/1–6/26 (no class 5/29), 10:30 am–12:30 pm  
Leslie Day | Online | 214HRT300BO

4 Tuesdays & 4 Thursdays, 5/11–6/3, 6–8 pm  
Nina Naghshineh | Online | 214HRT300CO

8 Thursdays, 6/10–7/29, 10:30 am–12:30 pm  
Manny Grossman | Online | 214HRT300DO

4 Wednesdays & 4 Mondays, 7/7–8/2, 6–8 pm  
Giselle Herrera | Online | 221HRT300EO

8 Sundays, 8/1–9/26, 10:30 am–12:30 pm  
Regina Alvarez | Online | 221HRT300FO
What’s Trending in Horticulture

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 an extra emphasis on hydroponic production. We’ll also cover the fundamentals of laws regulating cannabis production in the tri-state area. | $195/$215

6 Wednesdays, 3/3–4/7, 6–8 pm
Matthew DeBacco & Kelly Crosson
Online | 214HRT156DO

6 Tuesdays, 6/8–7/13, 6–8 pm
Matthew DeBacco & Kelly Crosson
Online | 214HRT156AO

6 Wednesdays, 8/4–9/8, 6–8 pm
Matthew DeBacco & Kelly Crosson
Online | 221HRT156BO

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 Sundays, 5/16–6/6 (no class 5/30), 11 am–1 pm
Anne Marie Breyer | Online | 214HRT142AO

3 Mondays, 7/12–7/26, 6:15–8:15 pm
Anne Marie Breyer | Online | 221HRT142BO

3 Sundays, 9/19–10/3, 11 am–1 pm
Anne Marie Breyer | Online | 221HRT142CO

SOIL SCIENCE | 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

9 Tuesdays, 5/4–6/29, 6–8 pm
Katharyn Grossman | Online | 214HRT301AO

9 Wednesdays, 6/2–7/28, 10 am–12 pm
Dave Bulpitt | Online | 214HRT301BO

9 Saturdays, 8/7–10/16 (no class 9/3 & 10/9), 10 am–12 pm
Manny Grossman | Online | 221HRT301CO

SOIL SCIENCE II: CHEMISTRY AND NUTRITION TRACKS 1, 2, & 3
Go beyond basic soil chemistry and examine how a soil’s pH affects what nutrients are available to plants. Explore the ionic exchange capacities of soil, the complex nitrogen cycle, and the affects of composted soil amendments and fertilizers. Discover how soil and plant tissue tests can help monitor plant nutrition and health. | Prerequisite: Soil Science | $395/$445

6 Wednesdays, 5/12–6/16, 6–9 pm
George Lozfeski | Online | 214HRT302O

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

7 Sundays, 4/11–6/6 (no class 5/9 & 5/30) 10 am †
Jennifer Cappello-Ruggiero | NYBG & Online | 214HRT358ABL

4 Wednesdays, 5/5–5/26, 6–8 pm &
3 Saturdays, 5/8–5/22, 10 am–12 pm
Shauna Moore | NYBG & Online | 214HRT358BBL

6 Wednesdays, 6/2–7/7, 10 am †
Timothy Nolan | NYBG & Online | 214HRT358CBL

7 Sundays, 6/13–8/1 (no class 7/4), 10 am †
Jennifer Cappello-Ruggiero | NYBG & Online | 214HRT358DDBL

7 Fridays, 7/16–8/27, 9 am †
Vincent Simeone | NYBG & Online | 221HRT358GBL

LANDSCAPE PLANTS: SPRING TREES AND SHRUBS TRACK 3 & 4
Learn the identification, classification, and landscape use of spring-flowering trees and shrubs. Major plant groups include Magnolia, Malus, Prunus, Viburnum, and other genera, which are particularly ornamental in spring. Blended class: online and on-site. | Prerequisite: Intro to Plant Science | $295/$325

6 Fridays, 4/9–5/14, 10:30 am–12:30 pm
Vincent Simeone | NYBG & Online | 214HRT334ABL

6 Saturdays, 4/10–5/15, 10 am–12 pm
Owen McLaughlin | NYBG & Online | 214HRT334BBL

3 Wednesdays, 4/21–5/5; 6–8 pm &
3 Sundays, 4/25–5/16, 10 am–12 pm
Duncan Himmelman | NYBG & Online | 214HRT334CBL

LANDSCAPE PLANTS: SPRING PERENNIALS TRACK 4
This course is designed for horticulturists and gardeners who are familiar with the basic culture of perennials. Study how to identify, classify, and use 60 spring-blooming perennials in the landscape. Review scientific and common names. Blended class: online and on-site. | Prerequisite: Intro to Plant Science | $219/$239

4 Sundays, 4/25–5/23 (no class 5/9), 10 am–12:15 pm
Shauna Moore | NYBG & Online | 214HRT336ABL

4 Tuesdays, 5/4–5/25, 10 am–12:15 pm
Michael Ruggiero | NYBG & Online | 214HRT336BBL

2 Thursdays, 6/3 & 6/17, 6–8:15 pm &
2 Saturdays, 6/12 & 6/26, 10 am–12:15 pm
Duncan Himmelman | NYBG & Online | 214HRT336CBL

PLANT COMMUNITIES TRACK 4
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, 5/21–6/4, 9:30 am †
Jessica Schuler | NYBG & Online | 214HRT353BL

INSTRUCTOR BIOS CAN BE FOUND ONLINE AT NYBG.ORG/ADULTED
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

- 6 Fridays, 9/24–11/5, 10 am–12 pm
- Tim Nolan | NYBG & Online | 221HRT331ABL
- 5 Sundays, 10/3–11/7 (no class 10/10), 10 am †
- Owen McLaughlin | NYBG & Online | 222HRT331BBL
- 5 Wednesdays, 10/13–11/10, 10 am †
- Michael Ruggiero | NYBG & Online | 222HRT331CBL

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. *Blended class: online and on-site.*  Prerequisites: *Intro to Plant Science and Soil Science* / $455/$495

- 9 Thursdays, 4/1–5/27, 5–7 pm (Rain Dates: Sundays, 4/25 & 5/23, 10 am–2:30 pm)
- Mobee Weinstein | NYBG & Online | 214HRT311PBL

INSECT PESTS OF LANDSCAPE PLANTS
TRACKS 1, 2, & 3
Learn to identify the insects common to the northeastern United States that feed on woody and herbaceous plants and the damage that they cause. Learn how to judge the severity of an infestation and to select and implement control measures based on the insect’s biology. *Blended class: online and on-site.*  Prerequisite: *Intro to Plant Science* $435/$479

- 4 Thursdays, 5/13–6/3, 6:15–8:30 pm & 3 Sundays, 5/16, 5/23, 6/6 (no class 5/30), 10 am–1 pm
- Mark Kokinchak | NYBG & Online | 214HRT381BL
- 4 Thursdays, 8/12–9/2, 6:15–8:30 pm & 3 Sundays, 8/15–8/29, 10 am–1 pm
- TBA | NYBG & Online | 221HRT381BBL

SUSTAINABLE GARDEN CARE  TRACK 4
Explore how to create a healthy garden while supporting biodiversity and conserving resources. *We’ll discuss ways to minimize water usage, effectively handle stormwater, create a healthy soil food web, and use non-toxic alternatives to maintain optimal plant health.*  Prerequisites: *Intro to Plant Science and Soil Science* / $195/$215

- 4 Mondays, 6/7–6/28, 6–8 pm
- Steven Conway | Online | 214HRT395O

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 class: online and on-site.*  Prerequisite: *Intro to Plant Science* / $475/$495

- 4 Tuesdays, 4/13–5/4, 6:15–8:30 pm & 3 Saturdays, 4/17–5/1, 10 am–1 pm
- Mark Kokinchak | NYBG & Online | 214HRT481ABL

- 4 Tuesdays, 10/5–11/16, 5–7:30 pm
- Nick Gershberg | Online | 221HRT312PO

MATHEMATICS FOR HORTICULTURISTS
TRACK 2
This course is designed for horticulturists who are responsible for maintaining or directing the maintenance of outdoor landscapes. We will cover how to calculate area to help estimate plants and soil needs, apply rates for fertilizers, and calculate amounts of soil amendments.  Prerequisite: Intro to Plant Science / $149/$165

- 3 Tuesdays, 3/16–3/30, 5–7 pm
- Mobee Weinstein | Online | 213HRT356O

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. Students must purchase materials per instructor guidelines.  Prerequisite: *Intro to Plant Science* / $395/$445

- 9 Mondays, 4/5–6/7 (no class 5/31), 5:30–7:30 pm
- Mobee Weinstein | Online | 214HRT411AO

- 9 Tuesdays, 7/13–9/14 (no class 9/7), 5:30–7:30 pm
- Mobee Weinstein | Online | 214HRT411BO

- 9 Wednesdays, 7/28–9/29 (no class 9/15), 6–8 pm
- Nick Storrs | Online | 221HRT411CO

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.  Prerequisite: *Intro to Plant Science* / $359/$395

- 8 Tuesdays, 9/28–11/16, 5–7:15 pm
- Nick Gershberg | Online | 221HRT312PO

† 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.
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.

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<th>Course</th>
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<tr>
<td>Horticultural Therapy for Youth with Disabilities</td>
<td>THR 402</td>
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<td>Horticultural Therapy for Physical Rehabilitation</td>
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<td>Horticultural Therapy for Older Adults</td>
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<td>Fundamentals of Gardening</td>
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<td>Horticultural Therapy in Behavioral Health Settings</td>
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<td>Horticultural Therapy Methods and Materials</td>
<td>THR 406</td>
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<td>Activities Analysis for Horticultural Therapy</td>
<td>THR 407</td>
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<tr>
<td>Introduction to Plant Science</td>
<td>HRT 300</td>
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<tr>
<td>Plant Propagation I: Basic Principles</td>
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<td>Garden Design for Special Populations</td>
<td>THR 408</td>
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<tr>
<td>Horticultural Therapy Program Management</td>
<td>THR 409</td>
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<tr>
<td>Horticultural Therapy Site Visits (see note below)</td>
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<td>TOTAL REQUIRED HOURS</td>
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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 with a prerequisite before you can register

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 718.817.8720.

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. 39 for more information.

INTRODUCTION TO HORTICULTURAL THERAPY
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. $395/$445

3 Saturdays, 4/10–4/24, 9–11:30 am &
3 Tuesdays, 4/13–4/27, 4–6:30 pm
Anne Meore, HTR | Online | 214THR301AO

3 Saturdays, 6/12–6/26, 9–11:30 am &
3 Tuesdays, 6/15–6/29, 5–7:30 pm
Anne Meore, HTR | Online | 214THR301BO

3 Tuesdays and 3 Fridays, 8/3–8/20, 9–11:30 am
Anne Meore, HTR | Online | 221THR301CO

HORTICULTURAL THERAPY FOR PHYSICAL REHABILITATION
Explore the team treatment process and the various conditions treated in a clinical 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. $419/$459

3 Tuesdays, 4/13–4/27, 6:30–9 pm &
3 Saturdays, 4/17–5/1, 10 am–12:30 pm
Matthew Wichrowski, HTR | Online | 214THR403AO

3 Wednesdays, 6/2–6/16, 6:30–9 pm &
3 Saturdays, 6/5–6/19, 10 am–12:30 pm
Matthew Wichrowski, HTR | Online | 214THR403BO
Horticultural Therapy Methods and Materials
Evaluate tools, equipment, structures, and techniques used by participants in horticultural therapy activities. Design and construct adaptive tools and assistive devices through problem-solving activities. Expand your plant-selecting skills for specific therapeutic programming needs as you explore NYBG’s gardens. Learn preventive approaches to safety in all horticultural therapy settings. Blended class: online and on-site. Prerequisite: Horticultural Therapy for Physical Rehabilitation | $469/$509

3 Saturdays & 3 Tuesdays, 4/24–5/25, 6:30–9 pm & 3 Saturdays, 5/8–5/29, 10 am–12:30 pm
Phyllis D'Amico, HTM | NYBG & Online
214THR406ABL

4 Sundays & 2 Wednesdays, 9/12–10/3 (no class 9/15), 10 am
Phyllis D’Amico, HTR | NYBG & Online
221THR406BBL

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. Prerequisite: Intro to Horticultural Therapy | $419/$459

3 Tuesdays, 5/4–5/25 (no class 5/11), 6:30–9 pm & 3 Tuesdays, 7/14–7/28, 6:30–9 pm & 3 Saturdays, 8/7–8/21, 10 am–12:30 pm
Abby Jaroslow, HTR | Online | 214THR404O

Horticultural Therapy in Behavioral Health Settings
Horticultural therapy is practiced in a multitude of behavioral health settings, including hospitals, day treatment programs, group homes, correctional facilities, and in private practice. Learn the diagnostic criteria for major psychiatric conditions, including anxiety, mood, psychotic, cognitive, and substance use disorders. Review actual case studies and create treatment plans utilizing horticulture activities for specific needs. Prerequisite: Intro to Horticultural Therapy | $419/$459

3 Tuesdays, 5/11–5/25, 6:30–9 pm & 3 Saturdays, 5/15–6/5 (no class 5/29), 10 am–12:30 pm
Hilda Krus, HTR | Online | 214THR404O

Horticultural Therapy Program Management
Learn how to design and implement a horticultural therapy program in the private or public sector. Gain skills in developing program proposals, writing protocols, establishing evaluation methods and record-keeping policies, and managing staff and volunteers. Topics in business practices will include budget development and management, legal aspects of business establishment, and fundraising. Prerequisites: Exceptional Youth, Older Adults, Physical Rehab, and Behavioral Health Settings | $419/$459

6 Tuesdays, 7/14–8/18, 6–8:30 pm
Nancy Minich, HTR, RLA | Online | 221THR408O

Activities Analysis for Horticultural Therapy
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. Prerequisite: Horticultural Therapy for Physical Rehabilitation | $419/$459

3 Tuesdays, 6/8–6/22, 6:30–9 pm & 3 Saturdays, 6/12–6/26, 10 am–12:30 pm
Abby Jaroslow, HTR | Online | 214THR407AO

3 Saturdays, 8/7–8/21, 10 am–12:30 pm & 3 Tuesdays, 8/10–8/24, 6:30–9 pm
Abby Jaroslow, HTR | Online | 221THR407BO

Horticultural Therapy for Youth with Disabilities
Gain insights into the causes and characteristics of developmental, sensory, physical, behavioral, and learning disabilities in children and adolescents. 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. Prerequisite: Intro to Horticultural Therapy | $419/$459

3 Wednesdays, 7/7–7/21, 6–8:30 pm & 3 Saturdays, 7/10–7/24, 9:30 am–12 pm
Phyllis D’Amico, HTM | Online | 221THR402O

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. Prerequisite: Horticultural Therapy for Physical Rehab | $419/$459

6 Wednesdays, 7/14–8/18, 6–8:30 pm
Nancy Minich, HTR, RLA | Online | 221THR408O
Landscape Design

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

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<td>Landscape Measurement**</td>
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<td>Landscape Plants: Fall Trees and Shrubs</td>
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<td>Graphics II</td>
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<td>Site Materials and Details</td>
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<td><strong>TIER 3</strong></td>
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<td>Business Practices for Landscape Professional**</td>
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<td>Landscape Design IV: Design and Construction**</td>
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<td>Portfolio and Presentation Skills **</td>
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<td>TOTAL REQUIRED HOURS</td>
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*Course hours do not include exam hours
**Courses offered in the Fall–Winter Catalog
P Courses with a prerequisite before you can register

For professional organizations, see p. 39.

QUESTIONS? CONTACT PROGRAM COORDINATOR
SUSAN COHEN AT Lancoordinator@nybg.org

ONLINE INTENSIVE PROGRAM

This summer program gets your career on the fast track! In just six weeks, you’ll develop a solid foundation in landscape history, graphics, plants, and design under the expert guidance of talented instructors and complete about 25% of all coursework required for the Certificate. All classes will be held online with the exception of Plants for Landscaping, which will meet several times outdoors on NYBG’s 250 magnificent acres.

THE CLASSES

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<td>Site Materials and Details</td>
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Monday—Friday, 7/12–8/20 & 8/27, 10 am start; end times vary

TUITION AND REFUNDS

$1,945 (Member) / $2,135 (Non-Member)
A $695 non-refundable deposit is due at registration.
An optional payment schedule is available if requested.

Students are required to purchase other supplies for the intensive as outlined in our online materials list, which total approximately $400.

Questions about the Intensive?
Call 718.817.8720 or email: adulted@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. | $185/$205

4 Saturdays, 4/10–5/1, 10 am–12 pm
Kimberly Tryba | Online | 214LAN100AO

4 Sundays, 5/16–6/13 (no class 5/30), 10 am–12 pm
Daryl Beyers | Online | 214LAN100BO

4 Thursdays, 6/3–6/24, 6–8 pm
Kimberly Tryba | Online | 214LAN100CO

4 Saturdays, 7/10–7/31, 10 am–12 pm
Kimberly Tryba | Online | 221LAN100DO

4 Saturdays, 8/7–8/28, 10 am–12 pm
Daryl Beyers | Online | 221LAN100EO

4 Saturdays, 9/18–10/16 (no class 10/9), 10 am–12 pm
Kimberly Tryba | Online | 221LAN100FO

SUBURBAN LANDSCAPE DESIGN

Bringing innovative design to an ordinary front or back yard can transform an underused or out-of-date area into a vibrant space. Presentations illustrate creative ways to enhance an entrance with paving and plants, make over a narrow side yard, and screen undesirable views. Topics include reliable trees and shrubs, new native plantings, and the use of borrowed views, fencing, and terraces. | $59/$65

Tuesday, 4/27, 10 am–12 pm
Jan Johnsen | Online | 214LAN160O

NEW! GARDEN DESIGN HISTORY WALK

Many important designers have shaped NYBG grounds throughout the years, including Calvert Vaux, Beatrix Farrand, Piet Oudolf, and Lynden B. Miller. Stroll the grounds with award-winning author Marta McDowell, who will discuss how the Garden’s plantings, pathways, ornaments, and structures illustrate the interplay of formal and informal styles that draw from many traditions across time. Outside only: rain or shine. | $75/$85

Thursday, 5/13, 9:30–11:30 am
Marta McDowell | NYBG | 214LAN267A

Thursday, 6/3, 9:30–11:30 am
Marta McDowell | NYBG | 214LAN267B

PLANT COMMUNITIES WORKSHOP

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, 5/21–6/4, 9:30 am †
Jessica Schuler | NYBG & Online | 214HRT353ABL

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 hand 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. | $295/$325

6 Tuesdays, 9/21–10/26, 6:30–8:30 pm
Adam Molinski | Online | 221LAN444O

CERTIFICATE CLASSES

These classes are open to Non-Certificate students.

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

8 Wednesdays, 4/7–5/26, 10 am–1 pm
Caitlin Merritt | Online | 214LAN301AO

9 Mondays, 4/19–6/21 (no class 5/31), 6–9 pm
Mark Bunnell, RLA | Online | 214LAN301BO

4 Mondays & 4 Wednesdays, 7/12–8/4, 10 am–1 pm
Caitlin Merritt | Online | 221LAN301CO

9 Tuesdays, 9/14–11/9, 6–9 pm
Mark Bunnell, RLA | Online | 221LAN301DO

GRAPHICS I: HAND RENDERING

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. Students must purchase materials per instructor guidelines. | $595/$655 Certificate Requirement

8 Thursdays, 4/22–6/10, 10 am–1 pm
Elizabeth Poccia | Online | 214LAN311AO

8 Tuesdays, 5/11–6/29, 6–9 pm
Elizabeth Poccia | Online | 214LAN311BO

4 Tuesdays & 4 Thursdays, 7/13–8/5, 10 am–1 pm
Elizabeth Poccia | Online | 221LAN311CO

8 Mondays, 9/20–11/15 (no class 10/11), 6–9 pm
Elizabeth Poccia | Online | 221LAN311DO

REGISTER ONLINE AT NYBG.ORG/ADULTED OR CALL 718.817.8720
Japan’s Tokachi Millennium Forest is an ecological project with a 1,000-year sustainable vision. Landscape designer Dan Pearson contributed to a master plan that has evolved under head gardener Midori Shintani to reflect principles at the heart of Japanese culture. Using breathtaking images from their new book, Tokachi Millennium Forest, Pearson and Shintani reveal this remarkable work that bridges East and West and embodies naturalistic gardening at its most inspiring.

Thursday, 4/1, 10–11 am | Online | 214LAN815O | $15/$18

GREEFS II: HAND RENDERING
Sharpen your graphic skills as you create a file of symbols and styles to draw upon for future professional use. Techniques for black-and-white and color rendering, sheet layout, section elevations, and perspectives are covered. Students must purchase materials per instructor guidelines. ☑ Prerequisite: Graphics I | $595/$655 Certificate Requirement

8 Fridays, 5/7–6/25, 10 am–1 pm
Elizabeth Poccia | Online | 214LAN411O

8 Tuesdays, 9/14–11/2, 6–9 pm
Elizabeth Poccia | Online | 221LAN411BO

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. ☑ Prerequisites: Landscape Design I and Graphics II | $575/$635 Certificate Requirement

9 Wednesdays, 4/7–6/2, 10 am †
Alice Eckerson | NYBG & Online | 214LAN428BL

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

12 Mondays, 5/3–8/2 (no class 5/31 & 7/5), 6–8 pm
Damon Arrington | Online | 214LAN422O

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. ☑ Prerequisites: Landscape Design II, Graphics III, and Plants for Landscaping. Recommended: Fall Trees and Shrubs and Spring Trees and Shrubs | $575/$635 Certificate Requirement

8 Thursdays, 9/23–11/18 (no class 11/11), 6:15–9:15 pm
Stacie Ellickson | Online | 221LAN403O
Urban Naturalist

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>
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<td>Introduction to Urban Ecology**</td>
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<td>The Ecosystems of New York City**</td>
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<td>TOTAL REQUIRED HOURS</td>
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**Courses offered in the Fall–Winter Catalog
Courses with a prerequisite before you can register

Wild Fox Grapes, *Vitis labrusca* (detail), Watercolor on paper, © Betsy Rogers-Knox
CERTIFICATE 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>
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<tr>
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<td>NAT 332</td>
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<td>Spotlight on Bird Songs</td>
<td>NAT 341</td>
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<td>Wolf Trees: Elders of the Eastern Forest</td>
<td>NAT 345</td>
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<td>Butterflies of the Northeast</td>
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<td>Night Callers: Bronx Bats</td>
<td>NAT 329</td>
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<td>Photographing Pollinators</td>
<td>NAT 335</td>
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<tr>
<td>Harriet Tubman: “The Ultimate Outdoorswoman”</td>
<td>NAT 361</td>
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<td>37</td>
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</tbody>
</table>

QUESTIONS? CONTACT PROGRAM COORDINATOR
NANCY SLOWIK AT NATCOORDINATOR@NYBG.ORG

BASIC PLANT ID

This is the class for plant-observers 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 Requirement

3 Tuesdays, 4/6–4/20, 5:30–7:30 pm | Clara Holmes | Online | 214BOT308AO
3 Thursdays, 5/13–5/27, 5:30–7:30 pm | Clara Holmes | Online | 214BOT308BO
3 Tuesdays, 6/15–6/29, 5:30–7:30 pm | Clara Holmes | Online | 214BOT308CO
3 Thursdays, 7/15–7/29, 5:30–7:30 pm | Clara Holmes | Online | 221BOT308DO
3 Tuesdays, 8/3–8/17, 5:30–7:30 pm | Clara Holmes | Online | 221BOT308EO
3 Tuesdays 9/14–9/28, 5:30–7:30 pm | Clara Holmes | Online | 221BOT308FO

NATIVE FLORA IN SPRING

Follow the bloom sequence of a wide variety of spring wildflowers, shrubs and trees. Learn to identify native plants using taxonomic keys and family characteristics. You’ll practice these skills using a 10X hand lens during walks in the Garden. Blended class: online and on-site. | Prerequisite: Basic Plant ID or Plant Structure | $295/$325 Certificate Requirement

5 Sundays, 4/11–5/16 (no class 5/9), (Rain date 5/23), 9 am † Nancy Slowik | NYBG & Online | 214BOT333ABL
5 Wednesdays, 4/21–5/19, (Rain date 5/26), 9 am † Nancy Slowik | NYBG & Online | 214BOT333BBL

NATURAL HISTORY OF BIRDS: SPRING

With its variety of habitats and position on the Atlantic Flyway, NYC is a birder’s paradise, with over 300 distinct resident or migratory species present at some point each year. Improve your ability to identify species by learning a variety of field marks, distinctive feather patterns, beak and body shapes, songs, and behaviors. | $295/$325 Certificate Requirement

4 Thursdays, 4/22–5/13, 9:30 am–12:30 pm Ken Chaya | Online | 214NAT317AO
4 Wednesdays, 5/26–6/16, 9:30 am–12:30 pm Ken Chaya | Online | 214NAT317BO

NEW! WOLF TREES: ELDERS OF THE EASTERN FOREST

Massive, charismatic deciduous trees—some more than 300 years old—are sprinkled throughout our woods. Ecologist Michael Gaige reveals the stories these “wolf trees” tell of settlers who cleared mighty forests to make way for pastures and past foresters who sought to cull them. He’ll show how wolf trees, with their advanced age, texture, and structure, support many woodland denizens. You’ll come away convinced that we should cherish them as key elements of our forests and manage them accordingly. | $59/$65 Certificate Elective

Wednesday, 6/2, 11 am–1 pm | Michael Gaige | Online | 214NAT345O

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. Explore the different vocalizations of our native birds, from soft chip notes to navigational flight calls, territorial declarations, and lovely courtship serenades. | $95/$105 Certificate Elective

Tuesday, 4/27, 10 am–1 pm | Ken Chaya | Online | 214NAT341A0
Wednesday, 6/23, 10 am–1 pm | Ken Chaya | Online | 214NAT341BO
Wednesday, 8/4, 10 am–1 pm | Ken Chaya | Online | 221NAT341CO

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 Fridays, 5/21–6/4, 10 am–12 pm | Nancy Slowik | Online | 214NAT332AO
3 Fridays, 8/13–8/27, 10 am–12 pm | Nancy Slowik | Online | 221NAT332BO

INSTRUCTOR BIOS CAN BE FOUND ONLINE AT NYBG.ORG/ADULTED
Harriet Tubman: “The Ultimate Outdoorswoman”

As a young enslaved girl in the swampy wetlands and upland forests of Dorchester County, Maryland, Harriet Tubman learned to navigate different ecosystems, mimic the sounds of birds, trap animals, and utilize plants for medicine and food. Maryland Park Ranger Angela Crenshaw reveals how Tubman, whom she calls “the ultimate outdoorswoman,” gained the expert naturalist skills that later helped her guide more than 70 enslaved people to freedom through the Underground Railroad.

Tuesday, 4/13, 11 am–12 pm | Angela Crenshaw | Online | 214NAT361O | $15/$18

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

Exercise or meditate within the Garden or 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, 4/10–6/5 (no class 5/29), 10–11 am
Robert Torres | NYBG | 214WEL102A

8 Saturdays, 9/11–11/6 (no class 10/9), 10–11 am
Robert Torres | NYBG | 221WEL102B

MEDICINAL MUSHROOMS: FUNGI FOR A HEALTHY BODY, MIND, AND PLANET
Emerging research suggests that mushrooms may be beneficial for brain and nerve health. Discover the properties of different species and learn where medicinal mushrooms occur locally. Study how select types such as Maitake, Reishi, and Lion’s Mane can help strengthen the immune system and increase resistance to stress. We’ll also explore how fungi have been used to clean toxins from the environment by filtering water and removing heavy metals from soil. | $45/$49

Saturday, 4/10, 11 am–12:30 pm | John Michelotti | Online | 214WEL181A

Tuesday, 8/24, 6:30–8 pm | John Michelotti | Online | 221WEL181BO

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. Examine the difference between good and bad bacteria and explore how each affects your energy level, skin, and overall health. You’ll also learn how to strengthen your digestion and create better eating habits, including by introducing fermented foods and herbal medicine into your diet. | $45/$49

Friday, 5/14, 6:30–8 pm | Cheryl Paswater | Online | 214WEL215AO

Friday, 9/10, 6:30–8 pm | Cheryl Paswater | Online | 221WEL215BO

FOREST BATHING
When surrounded by the tranquil beauty of trees, the mind naturally becomes quiet and peaceful. You will learn about forest therapy and see for yourself the research-proven health benefits of forest bathing. Learn basic sensory and meditation techniques to help you slow down and awaken your senses. Drawing from the Japanese practice of Shinrin-Yoku, Scandinavian nature philosophies, and other mindful practices, you’ll engage in mindful walking through NYBG’s Thain Family Forest. | $45/$49

Friday, 5/21, 10:30 am–12 pm | Nicole Joy Elmgart | NYBG | 214WEL145A

Thursday, 6/17, 10:30 am–12 pm | Nicole Joy Elmgart | NYBG | 214WEL145C

Sunday, 7/11, 10:30 am–12 pm | Nicole Joy Elmgart | NYBG | 221WEL145B

MEDICAL CANNABIS
Some 36 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. | $45/$49

Thursday, 6/10, 6:30–8 pm | Stephen Dahmer, M.D. | Online | 214WEL128O

ESSENTIAL OIL PERFUME WORKSHOP
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. | $45/$49

Wednesday, 7/14, 6–8 pm | Karine Gordineer | Online | 221WEL134B

Tuesday, 8/17, 6–8 pm | Karine Gordineer | Online | 221WEL134AO

BUILD A HERBAL FIRST AID KIT
Use herbal skills and recipes to treat many of life’s little mishaps. Herbalist Dawn Petter covers which herbs you should keep on hand and how best to use them. She’ll demonstrate how to blend various herbs to produce balms, creams, and poultices. You’ll put what you learn into practice to make a salve to relieve the itch of bug bites and a soothing topical infusion for bruises, pain, and sore muscles. Students are required to purchase materials from the list provided on our website. | $45/$49

Tuesday, 8/10, 6:30–8:30 pm | Dawn Petter | Online | 221WEL221O

- Blackthorn, Prunus spinosa (detail), Watercolor on paper, ©Liz Shippam
Continuing Education Units, Professional Societies, & Academic Programs

Continuing Education Units (CEUs)
APLD and ASLA Members: Don’t miss out! Get CEUs for many of our lectures. Events offering CEUs are noted in the catalog or on the individual event listing pages at nybg.org/adulted.

NYBG & Bronx Community College Associate Degree Program
NYBG and Bronx Community College of The City University of New York offer an Associate Degree program. The first year of the program is offered at BCC where students take academic courses. The second year is spent at NYBG, where students take academic courses and work in horticulture. For more information, contact Adijat Adelola at adijat.adelola@bcc.cuny.edu or 718.289.5538, or NYBG at 718.817.8720.

Tri-State Botanical Artists of NYBG (TSBA)
All NYBG Botanical Art & Illustration students are cordially invited to join the Tri-State Botanical Artists of NYBG. TSBA, a circle of the American Society of Botanical Artists, is a group of more than 90 like-minded artists that meets once a month to support each other and share resources. Meetings are free via Zoom. Each month, there will be a speaker who discusses a relevant topic such as fine art materials, galleries, botany, or gardens. For more information and to sign up for the e-newsletter, please contact sasapanara@gmail.com, jeanne.reiner@gmail.com, or gayegrossman@gmail.com

Landscape Design Students and Alumni Association (LDSA)
LDSA encourages a dynamic exchange of information among students, faculty, and alumni. It provides networking opportunities, as well as an indispensable Q&A service via a Yahoo Group available to all members. Monthly meetings feature guest speakers and informal design critiques, and are focused on topics in the professional arena. All students and alumni in Landscape Design, Horticulture, and Gardening are invited to attend. Call Elaine Yellen at 914.723.4090 for details.

American Horticultural Therapy Association (AHTA)
The AHTA promotes the development of horticultural therapy programming throughout the United States. Their mission is to help the profession gain visibility. The AHTA also administers a voluntary professional registration program that lists accredited horticultural therapists. For more information visit ahta.org

American Society of Botanical Artists (ASBA)
ASBA is a non-profit organization of more than 1,300 members throughout the US and in 20 other countries. Dedicated to promoting awareness of contemporary botanical art, ASBA provides educational opportunities through its annual conference and quarterly journal, The Botanical Artist. ASBA maintains their headquarters at NYBG on the third floor of the Watson Education Building. ASBA brings the best of contemporary botanical art to the public by curating the NYBG Triennial and other exhibitions. For information visit asba-art.org

Association of Professional Landscape Designers (APLD)
The APLD advances landscape design as a career and promotes the recognition of landscape designers as qualified professionals. It has established a set of rigorous standards that must be met to become certified. Student memberships are available for those actively enrolled in a landscape design or horticulture program. For more information visit apld.org

Department of Environmental Conservation (DEC)
The New York State Department of Environmental Conservation (DEC) requires commercial pesticide applicators to take a 30-hour course such as Preparation for Pesticide Applicator Certification Examination offered at NYBG, and pass a State-administered exam. Applicators must periodically apply for recertification and complete a number of courses approved by the DEC and the NJ State Department of Environmental Protection (DEP).

The Guild of Natural Science Illustrators (GNSI)
The Guild is an international organization whose members strive to maintain and further the field, assist others in entering it, and encourage high standards of competence. For information, visit isa-arbor.com

International Society of Arboriculture (ISA)
ISA is a worldwide network of professional arborists who foster a greater awareness of the benefits of trees, and promote the professional practice of arboriculture. For more information, visit isa-arbor.com

Saturday Online Herbal Workshops

Saturdays, June 26, July 10, & July 24
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 food, medicine, 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.

June 26, 10:30 am–12:30 pm
Karine Gordineer | $45/$49 | 214WEL130BO

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.

July 10, 10:30 am–12 pm
Christopher Satch | $45/$49 | 221WEL130CO

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.

July 24, 10:30–11:30 am
Arvolyn Hill | $35/$39 | 221WEL130DO

All sections take place online.
All three sections: $115/$125 | 214WEL130AO
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.

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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 718.817.8720 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 online via Zoom 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 adultedgraduation@nybg.org by March 27. You will be informed if you are eligible for a Certificate by April 19. Call the Registration Office at 718.817.8720 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.

**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—which includes three programs: Horticulture, Horticultural Therapy, and Landscape Design—is licensed with the New York State Bureau 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.
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!

Confirmations
Registration confirmations will be sent same day via email.

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.

Storm Closings
Class cancellations due to inclement weather will be rescheduled.

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

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

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

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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.*

- Charentais Melon, *Cucumis melo* 'Charentais', Egg tempera on panel, ©Kelly Leahy Radding