

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.



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“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



©Kiichi Noro

Dan Pearson and Midori Shintani TOKACHI MILLENNIUM FOREST

The Tokachi Millennium Forest on Hokkaido, Japan's northernmost island, is an ecological project with a 1,000-year sustainable vision. Celebrated landscape designer Dan Pearson contributed to the master plan with a sweeping Meadow Garden mixing colorful ornamentals with natives, and a wavelike Earth Garden echoing the mountains beyond. Under the skillful custodianship of head gardener Midori Shintani, Tokachi has evolved to reflect principles at the heart of Japanese culture: observation of seasonal changes, practical tasks performed with care, and the interconnectedness of all living things. Using breathtaking images from their new book, *Tokachi Millennium Forest*, Pearson and Shintani reveal this remarkable project that bridges East and West and embodies naturalistic gardening at its most inspiring.

Dan Pearson is renowned worldwide as a designer, horticulturist, and gardener. His many accolades include Honorary Fellow of the Royal Institute of British Architects and five award-winning Chelsea Flower Show gardens, including a 2015 Gold Medal and Best in Show. **Midori Shintani** trained in horticulture and landscape architecture at Minami Kyushu University. Since 2008 she has been head gardener of Tokachi Millennium Forest, merging “new Japanese horticulture” into wild nature.

Thursday, April 1, 10–11 am
Online | 214LAN8150 | \$15/\$18

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).

©Row 7 Seed Company



Dan Barber and Michael Mazourek

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'.

Tuesday, March 23, 11 am–12 pm | Online | 213HRT8240 | \$15/\$18



Yayoi Kusama, 2020

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.

Thursday, April 15, 11 am–12 pm | Online | 214HRT9240 | \$15/\$18

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 | 214HRT8210 | \$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 | 214BOT2880 | \$15/\$18



FINDING THE MOTHER TREE

A Conversation with Suzanne Simard



©Brendan Ko

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 | 214BOT8140 | \$15/\$18



Botanical Art & Illustration



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.

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.

Course	Code	Hours	Page
Botanical Drawing I: Methods and Materials	BIL 301	18	6
Botanical Drawing II: Developing Your Skills	BIL 302	P 18	6
The Basics of Visual Composition (should be completed early)	BIL 421	P 18	7
Botanical Drawing III: Focus on Flowers	BIL 303	P 18	6
Plant Morphology for Botanical Artists	BIL 300	P 20	6
Botanical Watercolor I	BIL 331	P 24	6
Practical Aspects of Botanical Art**	BIL 392	P 10	—
<i>Plus one of the following:</i>			
Internet Tools for Creatives, Social Media**	BIL 394	5	—
Internet Tools for Creatives, Website**	BIL 395	7	—
Pen and Ink	BIL 400	P 18	7
Colored Pencil	BIL 415	P 18	6
<i>Elective courses</i>		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.

Course	Code	Hours	Page
Watercolor II	BIL 332	P 18	6
Refined Graphic Rendering	BIL 370	P 9	7
Spring Flowers in Colored Pencil & Watercolor	BIL 405	P 9	7
Painting Orchids	BIL 399	P 14	7
Introduction to Gouache: Painting Magnolia Leaves	BIL 419	P 5	7
Egg Tempera Techniques	BIL 366	P 10	7
Painting and Drawing Owls	BIL 422	P 12	7
Insects in Colored Pencil	BIL 439	P 12	7

*Plus a final project that meets Certificate standards

**Courses offered in the Fall–Winter Catalog

P 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

BOTANICAL DRAWING FOR BEGINNERS

This intro class teaches you basic botanical illustration techniques to help you make realistic drawings of branches, stems, leaves, and flowers using graphite and colored pencil. | \$229/\$249

4 Tuesdays, 4/6–4/27, 11 am–2 pm | Linda M. Nemergut | Online | 214BIL145AO

4 Tuesdays, 5/4–5/25, 6–9 pm | Katy Lyness | Online | 214BIL145BO

4 Saturdays, 6/5–6/26, 11 am–2 pm | Scott Rawlins | Online | 214BIL145CO

4 Thursdays, 7/8–7/29, 11 am–2 pm | Katy Lyness | Online | 221BIL145DO

4 Fridays, 8/6–8/27, 11 am–2 pm | Linda M. Nemergut | Online | 221BIL145EO

4 Tuesdays, 9/14–10/5, 6–9 pm | Katy Lyness | Online | 221BIL145FO

NEW! COMPOSITION PLAIN AND SIMPLE

Make composition work for you! In this introductory overview, we will focus on a few key principles that will bring strength, balance, and the “wow” factor to your artwork in any medium. Analyze botanical art images, complete an in-class exercise, and participate in a critique of student art pieces that are emailed to the instructor in advance. | \$75/\$85

Saturday, 4/10, 10 am–3 pm | Betsy Rogers-Knox | Online | 214BIL156AO

Thursday, 8/12, 10 am–3 pm | Betsy Rogers-Knox | Online | 221BIL156BO

BOTANICAL WATERCOLOR FOR BEGINNERS AND BEYOND

This class is designed for both inexperienced students and those who wish to improve their skills. Lectures and demonstrations are enhanced by individual instruction. Work at your own pace on a variety of pieces. | \$345/\$379

5 Mondays, 5/3–6/7 (no class 5/31), 10 am–2:30 pm
Laura Vogel | Online | 214BIL140AO

5 Thursdays, 5/20–6/17, 10 am–2:30 pm Laura Vogel | Online | 214BIL140BO

5 Mondays, 6/21–7/26 (no class 7/5), 10 am–2:30 pm | Laura Vogel
Online | 214BIL140CO

5 Wednesdays, 7/7–8/4, 10 am–2:30 pm | Laura Vogel | Online | 221BIL140DO

5 Mondays, 8/2–8/30, 10 am–2:30 pm | Laura Vogel | Online | 221BIL140EO

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

Saturday, 5/1, 11 am–4:30 pm
Laura Vogel | Online | 214BIL207BO

DAFFODILS

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

NEW! ROSES

Sunday, 6/6, 11 am–4:30 pm
Adele Rosetti | 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, 7/10–8/14, 10 am–1 pm
Scott Rawlins | Online | 221BIL301BO

6 Tuesdays, 8/3–9/14 (no class 9/7),
11 am–2 pm
Laura Vogel | 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. **B** *Botanical Drawing I* \$435/\$479 *Certificate Requirement*

6 Wednesdays, 4/21–5/26, 11 am–2 pm
Laura Vogel | Online | 214BIL302AO

6 Thursdays, 6/24–7/29, 6–9 pm
Linda M. Nemergut | Online | 214BIL302BO

6 Saturdays, 9/18–10/30 (no class 10/9),
11 am–2 pm
Scott Rawlins | Online | 221BIL302CO

BOTANICAL DRAWING III: FOCUS ON FLOWERS

Apply your understanding of contours, perspective, and tone to accurately draw three distinct, fully-toned flowering plants. Explore compositional possibilities, textures, and details. **B** *Botanical Drawing II* \$435/\$479 *Certificate Requirement*

6 Wednesdays, 6/2–7/7, 6–9 pm
Robin Jess | Online | 214BIL303AO

6 Mondays, 7/12–8/16, 11 am–2 pm
Linda M. Nemergut | Online | 221BIL303BO

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. **B** *Botanical Drawing II* | \$569/\$625 *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*. **B** *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. **B** *Botanical Drawing II* | \$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. **B** *Botanical Drawing I* \$495/\$545 *Certificate Requirement*

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

PEN AND INK

Pen and ink, so versatile and useful, can be used to create high-quality, easily reproducible drawings. Learn to produce different strokes and create tone by using stipple, line, and crosshatch techniques.

■ *Botanical Drawing II* | \$435/\$479 *Certificate Requirement*

6 Fridays, 7/9–8/13, 11 am–2 pm
Carol Ann Morley | Online | 221BIL4000

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. **■** *Botanical Drawing II* | \$449/\$495 *Certificate Requirement*

4 Mondays, 9/13–10/4, 10 am–3 pm
Betsy Rogers-Knox | Online | 221BIL4210

NEW! PAINTING ORCHIDS

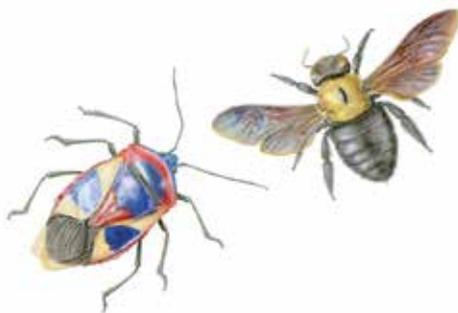
Learn to capture the exquisite beauty of these delicate flowers. On day one, morphology expert Dick Rauh will guide you through the fine details and special adaptations of a wide variety of orchids. Then, master orchid artist Carol Woodin will show you techniques to achieve the waxy textures, subtle colors, and graceful forms of this flower family. Each student will produce a bookplate-sized painting in the style of a botanical monograph. A Mini *Cattleya* or *Paphiopedilum* orchid will be purchased for each student, provided they can pick it up from the Garden. Students can also source their own. **■** Prerequisite: *Botanical Drawing II* | \$435/\$479 *Certificate Elective*

Wednesday 4/21, 10 am–12 pm &
Thursday–Friday, 4/22–4/23, 9:30 am–3:30 pm
Dick Rauh & Carol Woodin | Online | 214BIL3990

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 *Certificate Elective*

Saturday, 4/24, 11 am–4:30 pm
Carrie Di Costanzo | Online | 214BIL4190

**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 *Certificate Elective*

Tuesday, Thursday, Friday, 4/27, 4/29, 4/30,
11 am–2 pm
Wendy Hollender | Online | 214BIL4050

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 *Certificate Elective*

4 Fridays, 5/7–5/28, 11 am–2 pm
Jeanne Reiner | Online | 214BIL4390

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. **■** Prerequisites: *Botanical Drawing I* and some experience with watercolor | \$285/\$315 *Certificate Elective*

4 Mondays, 6/7–6/28, 11 am–2 pm
Mary Christiansen | Online | 214BIL4220

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, scumbling, 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 *Certificate Elective*

Saturday & Sunday, 8/7 & 8/8, 11 am–4:30 pm
Carrie Di Costanzo | Online | 221BIL3660

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 tortillions 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 *Certificate Elective*

3 Sundays, 8/15–8/29, 11 am–4:30 pm
Scott Rawlins | Online | 221BIL3700

They Wrote the Books:

New Publications by NYBG Botanical Art Instructors



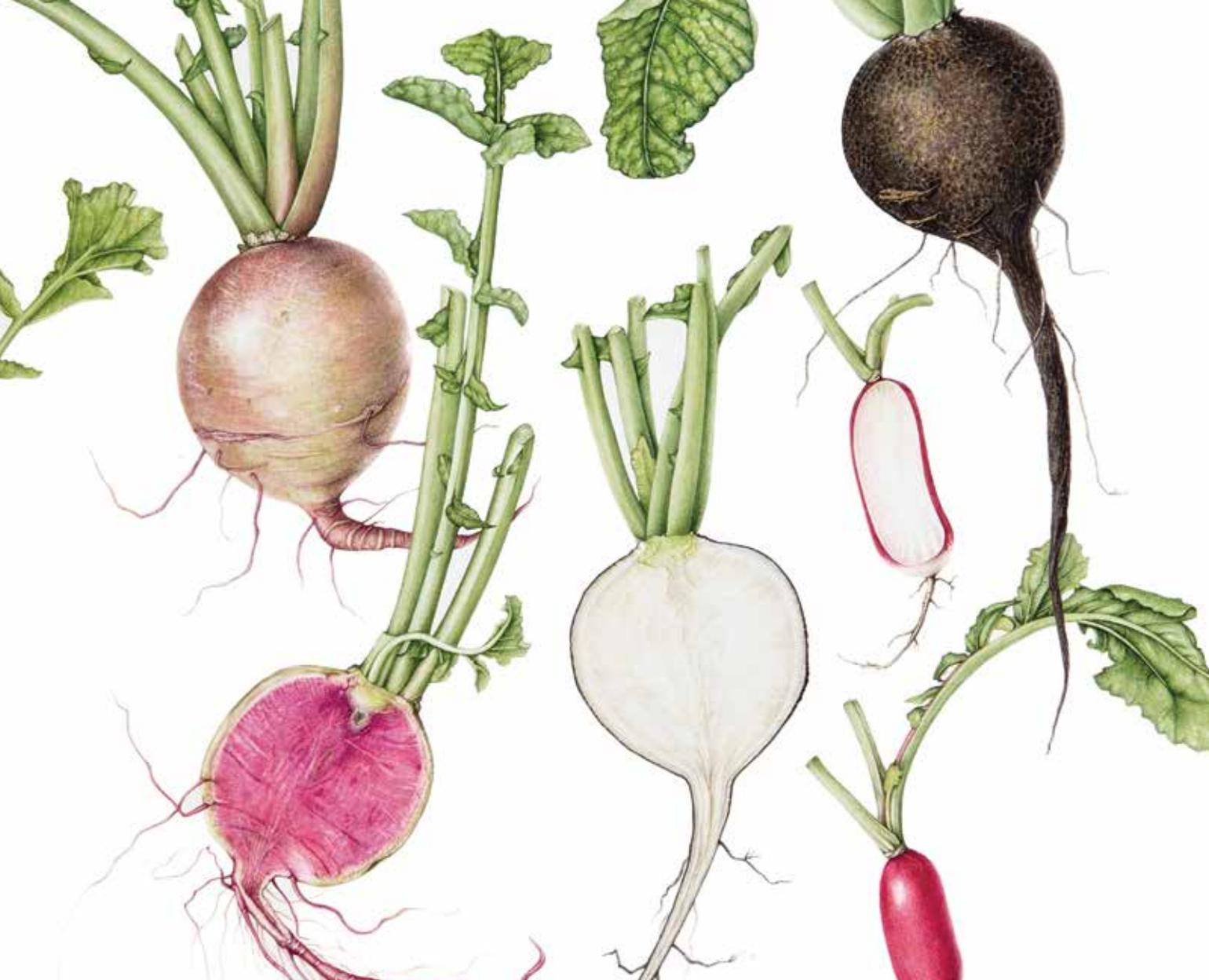
Join Robin Jess and Carol Woodin (*Botanical Art Techniques*), Dick Rauh (*The Science Behind Flowers*), and Wendy Hollender (*The Joy of Botanical Drawing*)—all supremely talented artists and beloved NYBG instructors—in a



lively and creative discussion of their recently published books. You'll get a sneak peek at the unique features of each and a behind-the-scenes look at what it takes to create books as beautiful as they are informative.



Friday, 4/16, 1–2 pm | Online | 214BIL2790 | \$15/\$18



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

Course	Code	Hours*	Page
Plant Structure	BOT 315	24	10
Plant Physiology**	BOT 316 P	21	10
Plant Diversity	BOT 317 P	24	10
Dendrology: Woody Plant Identification	BOT 375	15	10
Herbaceous Plant Identification	BOT 376	15	10
<i>One of the four Native Flora courses:</i>		12	—
Native Flora in Autumn	BOT 331		10
Native Flora in Winter**	BOT 332		—
Native Flora in Spring	BOT 333		9
Native Flora in Summer	BOT 334		10
<i>Elective Credits (See current electives below)</i>		58	
TOTAL REQUIRED HOURS		169	

ELECTIVES

Course	Code	Hours*	Page
Nature's Pharmacy	BOT 346	4	10
Botanical Latin	GAR 360	10	9
Forest Ecology	BOT 326	12	9
Ethnobotany: A Practitioner's Perspective	BOT 344	5	10
Morphology of Flowering Plants	BOT 431 P	16	10
Paleobotany: The Origin of Plants	BOT 434 P	12	10
Spring Mushrooms	BOT 330	6	9
Summer Mushrooms	BOT 356	6	10
The Science of Tree Communication	BOT 385	6	9
Pressing Plants For Art & Science	BOT 338	12	10
Psychedelic Mushrooms	BOT 302	2	9

*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

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. **P** Prerequisite: *Basic Plant ID* or *Plant Structure*. *Blended class: online and on-site.* | \$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

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*

2 Thursdays, 4/15 & 4/22, 10 am–1 pm
Paul Sadowski | Off-site & Online | 214BOT330BL

FOREST ECOLOGY

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

5 Saturdays, 4/24–5/22, 9:30 am †
Stephanie Schmiede | NYBG & Online | 214BOT326ABL

5 Wednesdays, 7/7–8/4, 5:30 pm †
Stephanie Schmiede | NYBG & Online | 221BOT326BBL

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*

Friday, 4/30, 6–8 pm | Eugenia Bone | Online | 214BOT302AO

Monday, 6/28, 6–8 pm | Eugenia Bone | Online | 214BOT302BO

Thursday, 8/26, 10:30 am–12:30 pm | Eugenia Bone | Online | 221BOT302CO

BOTANICAL LATIN

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

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

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

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*

3 Wednesdays, 5/5–5/19, 6–8 pm | Giselle Herrera | Online | 214BOT385AO

3 Tuesdays, 7/13–7/27, 6–8 pm | Steve Kutos | Online | 221BOT385BO

3 Sundays, 9/19–10/3, 10 am–12 pm | Giselle Herrera | Online | 221BOT385CO

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. **P** Prerequisite: *Plant Structure* | \$559/\$615 *Certificate Requirement*

8 Mondays, 4/19–6/14 (no class 5/31), 5–8 pm
Jamie Boyer, Ph.D. | Online | 214BOT3170

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.* **P** 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

ETHNOBOTANY: A PRACTITIONER'S PERSPECTIVE

NYBG Ethnobotanist Dr. Michael Balick has studied the relationship between plants and people for over 40 years. Explore the basics of ethnobotany, supplemented by stories and data gleaned from his own fieldwork. Discover how selected plant resources are used by traditional and postindustrial cultures today, as well as how plants have been used historically for healing and harm, foods and beverages, and their psychoactive effect. \$115/\$125 *Certificate Elective*

3 Mondays, 4/26–5/10, 5:15–7 pm
Michael Balick, Ph.D. | Online | 214BOT3440

HERBACEOUS PLANT IDENTIFICATION

Study the characteristics that are fundamental to herbaceous plant identification. We will focus on be on broad-leaved plants rather than grasses, sedges, and rushes. *Blended class: online and on-site.* **P** 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
Michael Hagen | 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. **P** Prerequisite: *Plant Structure* | \$395/\$435 *Certificate Elective*

8 Wednesdays, 5/19–7/7, 10 am–12 pm
Regina Alvarez | Online | 214BOT4310

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 base-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

Medicine, Knowledge, and Power in the Atlantic Slave Trade

Yale University Professor **Carolyn Roberts** discusses how enslaved Africans expertly used plants as herbal remedies in ways that were unknown to their European captors and contemporaries.

She vividly traces how particular African plants became incorporated into 18th-century medicine and what present-day phytochemical research reveals about why these medicines were so effective. | \$15/\$18

Tuesday, 5/18, 11 am–12 pm
Carolyn Roberts, Ph.D. | Online | 214BOT288O

NATIVE FLORA IN SUMMER

Learn to identify native and introduced herbs, ferns, shrubs, and trees as they appear in woodlands and wetlands in the summer. You will become familiar with their structure and taxonomy, and practice using taxonomic keys. *Blended class: online and on-site.* **P** Prerequisite: *Basic Plant ID* or *Plant Structure* | \$295/\$325 *Certificate Requirement*

3 Thursdays, 6/10–6/24, 6–8 pm &
2 Saturdays, 6/19 & 6/26, 9 am–12 pm
Clara Holmes | NYBG & Online | 214BOT334BL

PRESSING PLANTS FOR ART & SCIENCE

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

4 Fridays, 6/18–7/16 (no class 7/2), 2–5 pm
Daniel Atha | NYBG | 214BOT338

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. **P** 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 in the field.* | \$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.* **P** 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



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 | 214CRF2750

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

- Poorman Gooseberries, Utah 1888, *Ribes uva-crispa* ‘Poorman’ (detail), Watercolor on vellum, ©Linda Powers

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. Jessica 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
Jessica Clarke | NYBG | 214CRF285

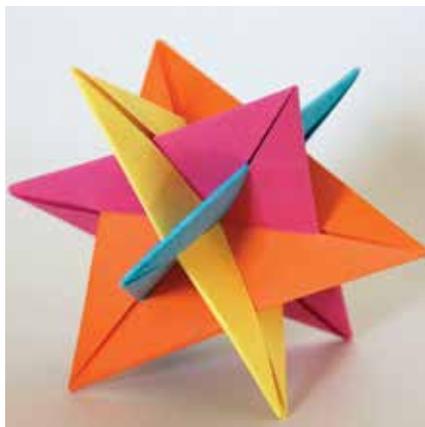
INTERMEDIATE BOTANICAL EMBROIDERY

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



Kusudama Origami

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

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

INDOOR FERN GARDENS

Design an indoor fern garden guided by Mobe Weinstein—NYBG's Foreman of Gardeners for Outdoor Gardens and author of *The Complete Book of Ferns*. She'll discuss a wide variety of ferns—their cultural requirements and how big they'll be—so you can properly care for those you combine into your own lush, living arrangement. Make your own in class, or watch and learn! | \$59/\$65

Saturday, 8/14, 11 am–1 pm
Mobe Weinstein | Online | 221CRF215O

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

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

Experiment with fermentation, food preservation, and mixology!

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



Vegan Jams for Craft Cocktails

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 | 214CKG241AO

Wednesday, 6/23, 6:30–8 pm
Cheryl Paswater | Online | 214CKG241BO



Make Ink: A Forager's Guide



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 mixology 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 oleo-saccharums, 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 | 221CKG2400

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 | 221CKG2310

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 | 221CKG2460

PICKLES, THREE WAYS

Return to great-grandma's tried-and-true process to make pickled cucumbers in three styles—spicy dill, sweet bread-and-butter, and zesty relish. Designed for beginners, this class covers the basics—from recipes to food prep to sterilizing. You'll pick up tips and tricks for pickling all kinds of produce, as well as recipes for tasty pickled goodies! | \$45/\$49

Saturday, 8/21, 11 am–1 pm

Stephen Nocera | Online | 221CKG2210

NEW! SUMMER EDIBLE PLANTS

Take a guided summer ramble with wild foods author and forager Marie Viljoen who will teach you how to identify and use the edible plants that surround us in plain sight, such as Beebalm, Sumac, Spicebush, Cornelian Cherries, and Aronia. See how these plants grow in the Garden as we discuss cultivation, conservation, and sustainable methods of foraging. Outside only; rain or shine. | \$59/\$65

Thursday, 8/19, 11 am–2 pm

Marie Viljoen | NYBG | 221CKG256

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 | 221CKG2260



Total Tomato



■ Portuguese Quince, *Cydonia oblonga* 'Portugal' (detail),
Colored pencil on paper, ©Margaret Best

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
<i>Elective courses</i>		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 Tablescape: Floral Runners	FDN 362	4	16

**Course offered in the Fall–Winter Catalog

P Courses with a prerequisite before you can register

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

**ONLINE
INTENSIVE
PROGRAM**

Jump-start your career in Floral Design! In our accelerated summer intensive program, you can complete almost 50% of the coursework required for the NYBG Certificate. You'll take the first five classes of the program and create dozens of arrangements in diverse styles for many different occasions.

THE CLASSES

Fundamentals of Form | Fundamentals of Style | Wedding Design I: Personals | Color Theory for Floral Design | Flower ID from A to Z

July 14–August 2, Monday & Tuesday, 6–8:30 pm & Wednesday–Friday, 10 am–4 pm | Online | 221FDN958AO

TUITION AND REFUNDS

\$2,295 (Member) / \$2,535 (Non-Member)

A \$845 non-refundable deposit is due at registration.

An optional payment schedule is available if requested.

We will order and ship flowers to you for *Form*, *Style*, and *Wedding*; the cost of this is included in the price listed above. Students are required to purchase other supplies for the intensive as outlined in our online materials list, which total approximately \$250.

Questions about the Intensive?

Call 718.817.8720 or email: adulted@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 | 214FDN243AO

Monday, 5/17, 6–8 pm | Nsombi Woodson | Online | 214FDN243BO

Monday, 6/21, 6–8 pm | Nsombi Woodson | Online | 214FDN243CO

Monday, 7/12, 6–8 pm | Nsombi Woodson | Online | 221FDN243DO

Wednesday, 8/4, 6–8 pm | Rose G. Edinger | Online | 221FDN243EO

Tuesday, 9/14, 6–8 pm | Nsombi Woodson | Online | 221FDN243FO

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

Sustainable Design

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 | 214FDN447O

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

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, 7/14–7/16, 10 am–4 pm
Thomas Cawley | Online | 221FDN300BO

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. **P** 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. **P** 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*

3 Mondays, 4/12–4/26, 6–8:30 pm
Rose G. Edinger | Online | 214FDN306AO

3 Tuesdays, 4/27–5/11, 6–8:30 pm
Rose G. Edinger | Online | 214FDN306BO

3 Mondays, 7/19–8/2, 6–8:30 pm
Rose G. Edinger | Online | 221FDN306CO

3 Thursdays, 10/21–11/4, 6–8:30 pm
Rose G. Edinger | Online | 222FDN306DO

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*

4 Wednesdays, 6/9–6/30, 10 am–12 pm
Chris Raimondi, CLP | Online | 214FDN310O

FLOWER ID FROM A TO Z

Learn to identify new floral varieties of old favorites, seasonal flowers, and various foliage. Topics include special handling requirements of many flower types. Students will source flowers per instructor guidelines. | \$195/\$215 *Certificate Requirement*

3 Thursdays, 5/6–5/20, 6–8:30 pm
Rose G. Edinger | Online | 214FDN308AO

3 Tuesdays, 7/13–7/27, 6–8:30 pm
Rose G. Edinger | Online | 221FDN308BO

3 Tuesdays, 10/19–11/2, 6–8:30 pm
Rose G. Edinger | Online | 222FDN308AO

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. **P** 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. **P** Prerequisite: *Wedding Design I* | \$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.

P Prerequisite: *Wedding I* | \$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. **P** Prerequisite: *Fundamentals of Style* | \$229/\$255 *Certificate Requirement*

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

Gardening



SEAN
KOZO

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.

CERTIFICATE REQUIREMENTS

Course	Code	Hours	Page
Fundamentals of Gardening	GAR 301	12	21
Introduction to Plant Science	HRT 300	16	25
Soil Science for Gardeners	GAR 302	12	22
Gardening with Native Plants	GAR 315	8	22
Insect Identification and Management	GAR 320	12	22
Disease Identification and Management	GAR 324	12	22
Fundamentals of Garden Design	GAR 342 P	12	22
Vegetable Gardening	GAR 431 P	12	22
Complete Garden Care and Maintenance	GAR 440 P	18	22
Pruning Principles and Practices**	HRT 321	15	—
Plants for Landscaping	HRT 358	16	26
Plant Propagation I: Basic Principles	HRT 411 P	18	27
<i>Elective GAR or HRT courses</i>		23	
TOTAL REQUIRED HOURS		187	

P Courses with a prerequisite before you can register

**Course offered in the Fall–Winter Catalog

For professional organizations, see p. 39.

ELECTIVES

Course	Code	Hours	Page
Organic Gardening Basics	GAR 308	8	21
Container Gardening	GAR 327	8	20
Botanical Latin	GAR 360	10	21
Rooftop Gardening	GAR 328	6	20
The Native Pollinator Garden	GAR 340	4	20
Super Small Space Veggie Gardening	GAR 330	9	20
Basics of Perennial Maintenance	GAR 323	6	19
Intro to Herbs	GAR 333	6	20
Designing with Shrubs	GAR 359	4	20
Gardening Strategies for Climate Change	GAR 379	4	21
Gardening with Ferns	GAR 348	6	21
Knowing and Growing Roses	GAR 361	4	21

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

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 | 214GAR3230

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 | 214GAR2160

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 | 214GAR2410

**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

Monday–Thursday, 5/3–7/1, 6–8 pm & 3 Saturdays, 5/8–5/22,
10 am–12 pm | NYBG & Online | 214GAR955AO

Monday–Friday, 7/6–8/19 & Friday, 8/27
10 am start; end times vary | NYBG & Online | 221GAR955BO

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

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 | 214GAR1340

SUPER SMALL SPACE VEGGIE 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 | 214GAR330BO

3 Thursdays, 8/5–8/19, 6–9 pm
Annie Novak | Online | 221GAR330CO

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 | 214GAR328AO

3 Tuesdays, 8/17–8/31, 6:15–8:15 pm
Annie Novak | Online | 221GAR328BO

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 | 214GAR2800



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 | 214GAR3330

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. | \$229/\$249 *Certificate Elective*

4 Thursdays, 5/6–5/27, 10 am–12 pm
Renee Marsh | Online | 214GAR327AO

4 Wednesdays, 6/9–6/30, 6–8 pm
Daryl Beyers | Online | 214GAR327BO

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 | 214GAR2120

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 | 214GAR173AO

2 Saturdays, 7/17 & 7/24, 10:30–12:30 pm
Michael Troy Brown | Online | 221GAR173BO

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, beetles, butterflies, moths, 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 | 214GAR3400

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, Mobe 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
Mobe 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 | 214GAR360BO

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

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

**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

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 | 214GAR213CO

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 | 214GAR213EO

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*. \$285/\$315 *Certificate Requirement*

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

6 Tuesdays, 7/6–8/10, 9–11 am
Manny Grossman | Online | 221GAR302BO

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 | 214GAR431AO

6 Wednesdays, 8/11–9/22 (no class 9/15), 6–8 pm
Stephen Nocera | Online | 221GAR431BO

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 Kokinchak | Online | 221GAR320O

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.* † Prerequisite: *Plants for Landscaping* \$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)
Mobe Weinsten | NYBG & Online | 214GAR440BL



Illustration: Two Orchids II, *Paphiopedilum* 'Doll's Kobold', ©Carol Woodin, NYBG Instructor

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

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



©Mark Andrew Photo for Dimastery Studio

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.

■ Black Soybean, *Glycine max* 'Tambaguro', Watercolor on paper, ©Akiko Enokido

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.

CERTIFICATE REQUIREMENTS

Course	Code	Hours	Page
Plant Production TRACK 1			
Introduction to Plant Science	HRT 300	16	25
Soil Science I: Physical Properties	HRT 301	18	26
Soil Science II: Chemistry and Nutrition	HRT 302 P	18	26
Horticultural Techniques: Greenhouse Practices	HRT 312 P	15	27
Insect Pests of Landscape Plants	HRT 381 P	18	27
Plant Propagation I: Basic Principles	HRT 411 P	18	27
Plant Propagation II: Applications**	HRT 412 P	13	—
Disease Identification & Management	HRT 481 P	18	27
Nursery and Greenhouse Management***	HRT 491 P	24	—
TOTAL REQUIRED HOURS		158	

Course	Code	Hours	Page
Sustainable Landscape Management TRACK 2			
Introduction to Plant Science	HRT 300	16	25
Soil Science I: Physical Properties	HRT 301	18	26
Soil Science II: Chemistry and Nutrition	HRT 302 P	18	26
Horticultural Techniques: Landscape Gardening	HRT 311 P	18	27
Pruning Principles and Practices**	HRT 321 P	15	—
Basic Design and Installation of Irrigation Systems***	HRT 323	12	—
Business Practices for the Landscape Professional**	LAN 457	12	—
Insect Pests of Landscape Plants	HRT 381 P	18	27
Tree Management**	HRT 422 P	14	—
Landscape Management**	HRT 443 P	24	—
Disease Identification & Management	HRT 481 P	18	27
Weed Identification & Management**	HRT 482 P	12	—
Mathematics for Horticulturists	HRT 356	6	—
TOTAL REQUIRED HOURS		201	

Course	Code	Hours	Page
Arboriculture TRACK 3			
Introduction to Plant Science	HRT 300	16	25
Soil Science I: Physical Properties	HRT 301	18	26
Soil Science II: Chemistry and Nutrition	HRT 302 P	18	26
Tree Climbing for Arborists***	HRT 304	15	—
Chainsaws: Use, Safety, and Maintenance	HRT 308	6	27
Pruning Principles and Practices**	HRT 321 P	15	—
Landscape Plants: Fall Trees and Shrubs	HRT 331 P	12	27
Landscape Plants: Conifers**	HRT 333 P	12	—
Landscape Plants: Spring Trees and Shrubs	HRT 334 P	12	26
Insect Pests of Landscape Plants	HRT 381 P	18	27
Tree Management**	HRT 422 P	14	—
Urban Tree Care**	HRT 426 P	12	—
Winter Tree Identification**	HRT 440 P	8	—
Disease Identification & Management	HRT 481 P	18	27
TOTAL REQUIRED HOURS		194	

Course	Code	Hours	Page
Sustainable Garden Design TRACK 4			
Introduction to Plant Science	HRT 300	16	25
Soil Science I: Physical Properties	HRT 301	18	26
Landscape Plants: Broadleaved Evergreens**	HRT 332 P	9	—
Landscape Plants: Spring Trees and Shrubs	HRT 334	12	26
Landscape Plants: Spring Perennials	HRT 336 P	9	26
Landscape Plants: Late-Season Perennials & Grasses	HRT 338 P	12	27
Landscape Plants: Annuals	HRT 341 P	8	27
Landscape Plants: Bulbs**	HRT 342 P	12	—
Annual and Perennial Garden Maintenance**	HRT 344 P	8	—
Plants for Landscaping	HRT 358	16	26
Plant Communities	HRT 353	6	26
Sustainable Garden Care	HRT 395	8	27
Sustainable Garden Design**	HRT 551 P	20	—
Landscape Design History	LAN 301	24	33
Graphics I	LAN 311	24	33
TOTAL REQUIRED HOURS		202	

*Course hours do not include exam hours

**Courses offered in the Fall–Winter Catalog

***Courses on-hold until indoor classes are possible

P 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

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 | 213HRT156DO

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 I ALL TRACKS

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

9 Tuesdays, 5/4–6/29, 6–8 pm
Katharhy 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 I* | \$395/\$445

6 Wednesdays, 5/12–6/16, 6–9 pm
George Lozefski | 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
214HRT358DBL

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



CHAINSAWS: USE, SAFETY, AND MAINTENANCE

Whether you are a budding arborist or weekend woodcutter, knowing how to use your chainsaw safely and maintain it properly are keys to success. This lecture-demonstration course by an ISA-certified arborist teaches you the basics of chainsaw use and care, sharpening, and bar tensioning. | \$145/\$159

3 Saturdays, 7/24–8/7, 10 am–12 pm
Julian Picciano | Online | 221HRT308O

LANDSCAPE PLANTS: ANNUALS TRACK 4

Study the identification, culture, and landscape use of approximately 60 annuals and select tender perennials, including major groups of common species and more unusual types. Learn how to choose low-maintenance plants, and review scientific and common names. *Blended class: online and on-site.* **P** Prerequisite: *Intro to Plant Science* | \$195/\$215

4 Fridays, 6/4–6/25, 9–11 am
Vincent Simeone | NYBG & Online | 214HRT341ABL

4 Saturdays, 7/10–7/31, 9–11 am
Michael Ruggiero | NYBG & Online | 221HRT341BBL

LATE-SEASON PERENNIALS & GRASSES TRACK 4

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

3 Wednesdays 9/22–10/6, 5:30–7:30 pm &
3 Saturdays, 9/25–10/16 (no class 10/9) 10 am–12 pm
Michael Hagen | NYBG & Online | 221HRT338ABL

5 Tuesdays, 9/28–10/26, 10 am †
Michael Ruggiero | NYBG & Online | 221HRT338BBL

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.* **P** 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.* **P** Prerequisites: *Intro to Plant Science* and *Soil Science I* | \$455/\$495

9 Thursdays, 4/1–5/27, 5–7 pm (Rain Dates:
Sundays, 4/25 & 5/23 10 am–2:30 pm)
Mobe Weinstei | 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. Study 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.* **P** 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. **P** Prerequisites: *Intro to Plant Science* and *Soil Science I* | \$195/\$215

4 Mondays, 6/7–6/28, 6–8 pm
Steven Conaway | 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.*

P 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

3 Saturdays, 6/12–7/10, (no class 6/19 & 7/3),
10 am–1 pm &
4 Wednesdays, 6/16–7/7, 6:15–8:30 pm
Mark Kokinchak | NYBG & Online | 214HRT481BBL

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. | \$149/\$165

3 Tuesdays, 3/16–3/30, 5–7 pm
Mobe Weinstei | Online | 213HRT356O

PLANT PROPAGATION I 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.

P Prerequisite: *Intro to Plant Science* | \$395/\$445

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

9 Tuesdays, 7/13–9/14 (no class 9/7), 5:30–7:30 pm
Mobe Weinstei | Online | 221HRT411BO

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.

P 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.



Horticultural Therapy

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.

Course	Code	Hours	Page
Introduction to Horticultural Therapy	THR 301	15	29
Horticultural Therapy for Youth with Disabilities	THR 402 P	15	30
Horticultural Therapy for Physical Rehabilitation	THR 403 P	15	29
Horticultural Therapy for Older Adults	THR 401 P	15	30
Fundamentals of Gardening	GAR 301	12	21
Horticultural Therapy in Behavioral Health Settings	THR 404 P	15	30
Horticultural Therapy Methods and Materials	THR 406 P	15	30
Activities Analysis for Horticultural Therapy	THR 407 P	15	30
Introduction to Plant Science	HRT 300	16	25
Plant Propagation I: Basic Principles	HRT 411 P	18	27
Garden Design for Special Populations	THR 408 P	15	30
Horticultural Therapy Program Management	THR 409 P	15	30
Horticultural Therapy Site Visits (see note below)		8	—
TOTAL REQUIRED HOURS		189	

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.

P 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. **P** Prerequisite: *Intro to Horticultural Therapy* | \$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, 4/24–5/11, 10 am †
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 Saturdays, 5/8–6/5 (no class 5/15 or 5/29),
10 am–12:30 pm
Kathy Brechner, HTR | Online | 214THR4010

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 | 214THR4040

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

4 Tuesdays, 5/18–6/8, 6:30–9 pm &
2 Saturdays, 5/22–6/5 (no class 5/29),
10 am–12:30 pm
Pat Czarnecki, HTR | Online | 214THR4090

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 | 221THR4020

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. 📌 *Horticultural Therapy for Physical Rehab* | \$419/\$459

6 Wednesdays, 7/14–8/18, 6–8:30 pm
Nancy Minich, HTR, RLA | Online | 221THR4080



■ Swiss Chard, *Beta vulgaris* 'Ruby Red' (detail),
Watercolor on paper, ©Mitsuko Schultz

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

Course	Code	Hours	Page
TIER 1– Introductory Classes			
Landscape Design History	LAN 301	24	33
Graphics I	LAN 311	24	33
Landscape Measurement**	LAN 340	P 12	—
Landscape Plants: Fall Trees and Shrubs	HRT 331	P 12	27
Landscape Plants: Spring Trees and Shrubs	HRT 334	P 12	26
Plants for Landscaping	HRT 358	16	26
TIER 2			
Landscape Design I: Site Analysis and Schematic Design	LAN 401	P 24	34
Landscape Design II: Design Development	LAN 402	P 24	34
Estimating**	LAN 380	P 9	—
Graphics II	LAN 411	P 24	34
Site Materials and Details	LAN 422	P 24	34
TIER 3			
Grading & Drainage	LAN 421	P 24	34
Graphics III	LAN 417	P 24	34
Landscape Design III: Planting Design	LAN 403	P 24	34
Business Practices for Landscape Professional**	LAN 457	12	—
Landscape Design IV: Design and Construction**	LAN 520	P 33	—
Portfolio and Presentation Skills **	LAN 555	P 15	—
TOTAL REQUIRED HOURS		337	

*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

**Landscape Design History | Graphics I | Plants for Landscaping
Landscape Design I**

Monday–Friday, 7/12–8/20 & 8/27, 10 am start; end times vary
NYBG & Online | 221LAN9550

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: adulded@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 of 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





©Kiichi Noro

TOKACHI MILLENNIUM FOREST

Dan Pearson and Midori Shintani

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 | 214LAN8150 | \$15/\$18

LANDSCAPE DESIGN I: SITE ANALYSIS AND SCHEMATIC DESIGN

Turning a vision into a plan is the designer's first challenge. Analyze landscapes, formulate the requirements of a design project, and then translate them into schematic design solutions. Take part in class discussions and critiques, and present projects. Extensive out-of-class design homework required. **P** Prerequisites: *Landscape Design History* and *Graphics I* | \$575/\$635 *Certificate Requirement*

8 Thursdays, 4/29–6/17, 6:15–9:15 pm
David Holzman | Online | 214LAN401AO

Mondays–Thursdays, 8/9–8/19, 10 am–1 pm
David Holzman | Online | 221LAN401BO

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. **P** Prerequisites: *Landscape Design I* and *Graphics III* | \$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. **P** Prerequisite: *Graphics III* | \$575/\$635 *Certificate Requirement*

12 Mondays, 5/3–8/2 (no class 5/31 & 7/5), 6–8 pm
Damon Arrington | Online | 214LAN4220

GRAPHICS 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.

P Prerequisite: *Graphics I* | \$595/\$655
Certificate Requirement

8 Fridays, 5/7–6/25, 10 am–1 pm
Elizabeth Poccia | Online | 214LAN4110

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

GRAPHICS III: SKETCHUP

Build and expand your graphic presentation skills to create professional presentations for clients with Trimble SketchUp, a 3D sketching software program. A laptop computer (PC or Mac) with SketchUp is required. **P** Prerequisite: *Graphics II* | \$595/\$655 *Certificate Requirement*

8 Tuesdays, 5/18–7/6, 6–9 pm
TBA | Online | 214LAN4170

LANDSCAPE DESIGN II: DESIGN DEVELOPMENT

Apply basic design to site-specific problems, focusing on the process of design development. Start with a concept, then progress through the schematic phase to a preliminary design solution. Examine the relationships of landscape elements and materials to the design process. **P** Prerequisites: *Landscape Design I* and *Graphics II* | \$575/\$635 *Certificate Requirement*

8 Thursdays, 9/23–11/18 (no class 11/11),
6:15–9:15 pm
David McConnell | Online | 221LAN4020

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. **P** 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 | 221LAN4030

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



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

Course	Code	Hours	Page
Basic Plant ID	BOT 308	6	36
<i>Two of the four Native Flora courses:</i>			
Native Flora in Autumn	BOT 331 	12	37
Native Flora in Winter**	BOT 332 	12	—
Native Flora in Spring	BOT 333 	12	36
Native Flora in Summer	BOT 334 	12	37
Natural History of Birds	NAT 321	12	36
Natural History of Insects	NAT 322	9	37
Introduction to Urban Ecology**	NAT 338	4	—
The Ecosystems of New York City**	NAT 337 	6	—
Urban Ecology Field Study Workshop	NAT 323 	9	37
<i>Elective Credits (See current electives below)</i>		30	
TOTAL REQUIRED HOURS		100	

**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.

Course	Code	Hours	Page
Urban Flora: Growing Between the Cracks	NAT 332	6	36
Spotlight on Bird Songs	NAT 341	3	37
Wolf Trees: Elders of the Eastern Forest	NAT 345	6	36
Dragonflies & Damselflies of the Northeast	NAT 311	6	37
Butterflies of the Northeast	NAT 336	6	37
Pollination Ecology	NAT 325	6	37
Night Callers: Bronx Bats	NAT 329	2	37
Photographing Pollinators	NAT 335	6	37
Harriet Tubman: “The Ultimate Outdoorswoman”	NAT 361		37

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

BASIC PLANT ID

This is the class for plant-lovers eager to up their game! Learn the terminology and basic botanical nomenclature that will help you recognize and describe key differences in common plants. | \$145/\$159 *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 bird-lover'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 | 214NAT341AO

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

URBAN ECOLOGY FIELD STUDY

Learn to measure and monitor the ecological diversity observed and celebrated in and around New York City environs. Practice using field techniques for recording observations in nature and assessing vegetation, animal life, and habitats. *Blended class: online and on-site.* | \$225/\$245 *Certificate Requirement*

3 Tuesdays, 6/1–6/15 (Rain date 6/22), 9 am †
Nancy Slowik | NYBG & Online | 214NAT323BL

NATIVE FLORA IN SUMMER

Learn to identify native and introduced herbs, ferns, shrubs, and trees as they appear in woodlands and wetlands in the summer. You will become familiar with their structure and taxonomy, and practice using taxonomic keys. *Blended class: online and on-site.*  *Prerequisite: Basic Plant ID or Plant Structure* | \$295/\$325 *Certificate Requirement*

3 Thursdays, 6/10–6/24, 6–8 pm &
2 Saturdays, 6/19 & 6/26, 9 am–12 pm
Clara Holmes | NYBG & Online | 214BOT334BL

NATURAL HISTORY OF INSECTS

Study the critical and fascinating roles that insects play in maintaining healthy ecosystems and within their own complex social systems. Learn to observe and identify insects while exploring the wonder of metamorphosis and the amazing variety of defensive strategies and adaptations insects have developed to survive. | \$225/\$245 *Certificate Requirement*

3 Thursdays, 6/17–7/8 (no class 7/1), 10 am–1 pm
Ken Chaya | Online | 214NAT322O

NEW! DRAGONFLIES & DAMSELFLIES OF THE NORTHEAST

Learn how to identify this unique order of insects as they take to the skies in early summer. Study their biology, behavior, habitat associations, and conservation efforts currently underway. \$125/\$139 *Certificate Elective*

3 Mondays, 7/12–7/26, 10 am–12 pm
Alan Wells, Ph.D. | Online | 221NAT311O

NEW! BUTTERFLIES OF THE NORTHEAST

Focusing on species commonly found in our region—from Giant Swallowtails to tiny Least Skippers, learn how to identify butterflies, where to look for them, and which plants attract them. As we explore NYBG's lush grounds, we'll also cover tips on how to use photography to record your observations. Close-focus binoculars are highly recommended. *Blended class: online and on-site.* | \$125/\$139 *Certificate Elective*

3 Wednesdays, 7/14–7/28, 10 am–12 pm
Ken Chaya | NYBG & Online | 221NAT336BL

POLLINATION ECOLOGY

Study the crucial role birds, insects, and bats play in local ecosystems. Expert naturalist Alan Wells discusses the many different types of pollination, as well as how the roles played by a plant's flower structure, nectar production, and fragrance. \$145/\$159 *Certificate Elective*

3 Wednesdays, 8/11–8/25, 10 am–12 pm
Alan Wells, Ph.D. | Online | 221NAT325O

NEW! PHOTOGRAPHING POLLINATORS

Discover tips and tricks for finding and capturing pollinators in action, as well as the best ways to approach subjects in the field. Practice new techniques on Garden grounds and learn to get the most from your equipment, whatever you may use. We will also cover post-processing techniques. *Blended class: online and on-site.* | \$79/\$85 *Certificate Elective*

2 Saturdays, 8/21 & 8/28, 11 am–1 pm
Ken Chaya | NYBG & Online | 221NAT335BL



©Alan W. Wells

NIGHT CALLERS: BRONX BATS

Venture onto NYBG's grounds to locate and identify bats through their ultrasonic calls with J. Alan Clark, Ph.D., co-author of *Bats in the Bronx*, a recent study of five local bat species. We hope to detect several species, including Eastern Red bats and possibly Silver-Haired bats. Outside only; rain or shine. | \$85/\$95 *Certificate Elective*

Tuesday, 8/24, 6:30–8:30 pm
J. Alan Clark, Ph.D. | NYBG | 221NAT329

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.*  *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 | 221BOT331BBL

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. See 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 | 214WEL181AO

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 | 221WEL134AO

Tuesday, 8/17, 6–8 pm | Karine Gordineer | Online | 221WEL134BO

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



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

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 Adebola at adijat.adebola@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 ssapanara@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 apl.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



NYBG SCHOOL OF PROFESSIONAL HORTICULTURE

NYBG's School of Professional Horticulture offers a comprehensive, full-time, two-year program combining hands-on training with academic study to educate and prepare you to become a skilled professional horticulturist. With a nearly 100% job placement rate, alumni have successful careers in public and private sectors, including estate management, landscape design/build firms, and public parks and gardens.

The School is nationally accredited by ACCET and licensed by the New York State Education Department. Federal financial aid is available to qualified students.

For a catalog, visit nybg.org/edu/soph or call 718.817.8797.

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.

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

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 Mosholu 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

A WORD ON ONLINE CLASSES

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

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

A WORD ON BLENDED CLASSES

Blended classes mean that instruction takes place both online via Zoom and in-person. The in-person instruction takes place entirely outside on NYBG grounds, rain or shine. We believe this is essential for Horticulture, Botany, and Naturalist students to become proficient at identifying plants and understanding their culture, ecology, and maintenance requirements.

Safety remains our top priority. Everyone on Garden grounds is required to wear a face covering and maintain six feet of social distance at all times.

Registration Is Easy!

Web

Register online at nybg.org/adulted

Phone

718.817.8720 Registration Office, M–F 9 am–5 pm

The Garden | Quick and easy to reach:

Bronx River Parkway (Exit 7W)

 Metro-North Railroad to Botanical Garden Station



Midtown Education Center

Two blocks from Grand Central Terminal

20 West 44th Street, between 5th and 6th Avenues; 212.302.2054

The Midtown Education Center is currently closed.

KUSAMA: Cosmic Nature Sponsors

April 10–October 31

Spotlight on Orchids Sponsors

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New York Botanical Garden
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Bronx, New York 10458-5126
Address Service Requested



Keep Growing at NYBG

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

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

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