

# NYBG

ADULT EDUCATION | FALL 2019–WINTER 2020



NEW YORK BOTANICAL GARDEN

# Welcome

In March 1919, NYBG offered its first formal class in horticulture—to veterans returning from World War I. That same year, we added classes in vegetable gardening and botany, opening them up to the broader public. By year end, 72 students had enrolled in the program, including the first woman, Miss Daisy Colburn.

Today, 100 years later, our Adult Education catalog features hundreds of courses in eight formal Certificate Programs, plus classes in Wellness, Food & Drink, Photography, and Crafts. It's a one-of-a-kind resource, at every level, for thousands of people with a passion for plants and the natural world.

That world is under pressure like never before, as a landmark UN report warned in May. More than one million plant and animal species are at risk of extinction in the next few decades if we don't act now. This fall we'll explore actions we can take, through lectures and symposia with leading thinkers and scientists, including Sir Robert Watson who oversaw the UN report, eco-journalist Bill McKibben, and entomologist Doug Tallamy, who will take it to your own backyard.

They join our great lineup of leading gardeners, designers, and artists featured in lectures and workshops—in addition to our classes for adult learners at all levels.

So please spend some time with this new catalog. Whether you're inspired working with a vase, in a garden, at an easel, or on a drawing board...it's packed with ways to satisfy your curiosity, pursue your passions, and advance your career.

***If you have never taken a class with us before...***welcome to the catalog. Each section leads off with short, intro classes you can take just for fun. As a matter of fact, you may register for any class that doesn't have a prerequisite, including those labeled "Certificate Elective" or "Certificate Requirement."

***If you are a returning student...***welcome back! We have dozens of new classes and workshops for you to explore and discover.

***If you are on a new career path or thinking about a career change...*** Think about upgrading your professional profile and actively pursuing a prestigious NYBG Certificate. Develop new skills, contacts, and cross-disciplinary experience. Catch up with the latest industry changes. A NYBG Certificate is a serious credential that tells employers and clients that you've made a serious commitment to your professional development.

***Choose*** from a wide variety of day, evening, and weekend classes at the Garden or at our Midtown Education Center. Our programs are made to fit your needs, as well as your schedule.

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**Registration is now open.** Please visit [nybg.org/adulted](http://nybg.org/adulted) or call 718.817.8747. Prices listed are Member/Non-Member. Not a Member yet? Call 718.817.8703.



*WWI veterans in NYBG's first vegetable gardening class, July 1919*



*First female student, disbudding peonies, May 1919*

Courtesy of the LuEsther T. Mertz Library

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©Jared Cullum, *Conservatory*, Watercolor



**ABOUT THE COVER:** The watercolor of the Enid A. Haupt Conservatory was painted during NYBG's Plein-Air Invitational in early May 2019. Shortly thereafter, restoration of the iconic palm dome began, part of routine maintenance of the Garden's facilities, to ensure that the collections beneath it continue to thrive for years to come. The Conservatory remains open, with periodic gallery closures until May 2020, and there are always spectacular vistas and exciting programs to enjoy throughout our 250 acres.

# 21st Annual Landscape Design Portfolios Lecture Series

## RESPONDING TO THE LAND

Three outstanding landscape architects from around the world showcase their signature projects, working methods, and design philosophies. This year's influential trio feel passionately about the need to co-design with nature and create spaces where people want to spend time. Join these fascinating speakers to see how creative thinking is re-imagining the practice of landscape design.

**3 Mondays, October 7, October 21,  
November 4, 6:30–7:30 pm**

**Scandinavia House, 58 Park Avenue  
at 38th Street, Manhattan**

### KIM WILKIE



#### The Animated Prospect

As pressures on food, water, and atmosphere intensify, the responsibilities and concerns of landscape architecture are increasing as well. It is more about the life in the soil than the polish on the pavers. In his work, Kim Wilkie breathes new life into the English Landscape Movement's concept of the animated prospect: the rich vitality of the land—human,

domestic, and wild. Pointing to his recent projects—the Natural History Museum in London, a new hanging-gardens-of-Babylon city in Oman—as well as lessons learned on his own small farm in Hampshire, he will explain how his deep appreciation for the living landscape allows the land to lead him.

After 25 years running his own practice, Kim Wilkie, MLA, now works as a strategic and conceptual landscape architect. He is a Royal Designer for Industry, an Honorary Fellow of the Royal Institute of British Architects, and serves on various landscape and environmental policy committees in the UK. Wilkie is a sought-after speaker who writes optimistically about land and place. A new edition of *Led by the Land*, his influential exploration of landscape, sustainability, regeneration, and design, will be published this fall by Pimpernel Press.

**October 7 | 202LAN801B**



### DANIEL VASINI



#### Landscape Transformations

"Landscape architecture is about illusion," says Daniel Vasini. "You create an illusion when you see it from far away, when you get closer, when you're under it. Creative Director in New York for award-winning international design firm

West 8, Vasini will highlight innovative projects, including Governors Island, for which West 8 won an international design competition and produced an 87-acre Master Plan, and Miami Beach Soundscape, which transformed a parking lot into a three-acre garden—an urban oasis adjacent to a Frank Gehry-designed campus. He will also discuss the master plan created for Longwood Gardens with the goal of fashioning "a great garden of the world"—one that meets the highest standards of sustainability while honoring the legacy of founder Pierre S. DuPont.

Daniel Vasini has led top-tier, multidisciplinary projects, specializing in transformative urban waterfront designs that address urbanization challenges, infrastructure needs, sustainability goals, natural conditions, and identity of place. He earned a Masters of Architecture from the Southern California Institute in Los Angeles and lectures at universities and conferences around the world.

**October 21 | 202LAN801C**



Miami Beach Soundscape, ©Robin Hill

### ANDREA COCHRAN



#### Immersive Landscapes

"The edges become diaphanous, the spaces ephemeral." Andrea Cochran blurs lines—between nature and the built environment, between exterior and

interior, between our need for expansion and for refuge. The interplay between light, shadow, and materials at Windhover Contemplative Center, an art gallery and garden at Stanford University, creates a chapel-like calm on a bustling campus. Helen Diller Civic Center Playground, with its soaring steel spires, interactive light pieces, and inventive play structures, breathes new life into a once-seedy San Francisco plaza. And two private homes—the Telegraph Hill Residence (California) and the Birmingham Residence (Michigan)—dissolve the barriers between the inhabitants and the surrounding landscapes.

Andrea Cochran, FASLA, is a recipient of the Smithsonian's Cooper-Hewitt National Design Award in Landscape and the ASLA Design Medal. Her firm, Andrea Cochran Landscape Architecture, has garnered an ASLA Award of Excellence in Residential Design for the Birmingham Residence, and numerous other awards. She graduated from Harvard University's Graduate School of Design.

**November 4 | 202LAN801D**



The Windhover Contemplative Center ©Matthew Millman

Registration fee for each lecture: \$23/\$26. Register for the series and receive a discount: 202LAN801A | \$62/\$69

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

SUPPORT GENEROUSLY PROVIDED BY THE HEIMBOLD FAMILY.



## 20th Annual Winter Lecture Series

### THE GARDEN CAME FIRST

This year's series spans styles and settings to showcase the distinctive home gardens of three celebrated gardeners, designers, and plantsmen. Whether a private retreat, a romantic dreamscape or a plant collector's paradise, these signature spaces reveal the designers' unique palettes, key influences, and themes that reoccur throughout their greater work. Join our extraordinary speakers as they share the personal visions behind their personal spaces, where—even in the early planning stages of their homes—the garden always came first.

**3 Thursdays, January 30,  
February 27, March 26, 10–11:30 am**  
**Ross Hall, NYBG**

#### DEBORAH NEVINS



##### East End, Long Island, NY

Deborah Nevins is one of the world's most sought-after landscape designers—creating ambitious, innovative projects for high-profile clients worldwide—yet her own, understated

two-acre space on Long Island's East End is intimate and contemplative. The house and gardens were built to maximize the impact of existing stately oaks and cedars, while leaving the perimeter wild. Rows of sycamores and hedges within hedges of hornbeam and boxwood evoke an enclosed green room, yielding glimpses of the lush flower garden beyond, its wide paths lined with elegant perennials. It's a perfect blend of past and present, the English tradition through a Modernist lens.

**Deborah Nevins** is president of Deborah Nevins & Associates, a landscape design firm founded more than 20 years ago. Noted for exciting visual experiences, a sophisticated use of plants, and a dedication to sustainability, her work includes the 40-acre Stavros Niarchos Cultural Center in Athens (with Renzo Piano Building Workshop); the expanded campus at Museum of Fine Arts, Houston; the Art Institute of Chicago's Pritzker Garden, and significant gardens and estates in the U.S., the Caribbean, and Europe. A historian of landscape and architecture, Nevins lectures widely and contributes to numerous books, journals, and periodicals.

**January 30 | 203GAR801B**



#### ISABEL BANNERMAN



##### Trematon Castle, Cornwall, UK

With a body of work that is dramatic, romantic, and grounded in classical tradition, Isabel and Julian Bannerman have been called “mavericks in the grand manner, touched by genius” and “the Bonnie and Clyde of garden design.”

The Bannerman touch—evocative gestures with unexpected accents that enhance reality and inspire reverie—is perhaps best realized in their own gardens. Trematon, a Norman castle overlooking the sea in Cornwall, enjoys a unique setting, topography, architecture, and history. Against a backdrop of ancient keep and walls, cultivated borders overflowing with tangled roses, scented shrubs, and richly colored perennials bleed away into wilder meadows, mixed woodlands, and orchards.

**Isabel Bannerman** has been designing gardens with her partner, Julian, since 1983. Their work includes the British 9/11 Memorial Garden in NYC, as well as gardens for the Prince of Wales at Highgrove, the Duke and Duchess of Norfolk at Arundel Castle in Sussex, and John Paul Getty II in Buckinghamshire. They have won numerous awards, including an RHS Chelsea Gold, authored the book *Landscape of Dreams*, and most recently Isabel's *Scent Magic*, a personal gardening memoir that's also a compendium of aromatic plants.

**February 27 | 203GAR801C**



#### SEAN HOGAN



##### Rancho Cistus, Sauvie Island, OR

Plantsman extraordinaire Sean Hogan has nurtured a thriving horticulture community in the Pacific Northwest, altering that region's perspective about plants, as well as long-held ideas across the U.S. and Europe. Hogan's former

home—a “garden with house attached” squeezed onto a Portland city lot—was celebrated as both a social hub and a lush, exuberant “plant lab” featuring tropical imports alongside drought-resistant natives. Rancho Cistus, his new five-acre property on Sauvie Island, is a showcase of right-plant, right-place gardening located adjacent to Hogan's Cistus Nursery—a “retail micro-nursery” and “refuge for hort-heads and plant nerds”—known worldwide for its unique collections and its advocacy for rare and underused plants.

**Sean Hogan** is an acclaimed, plantsman, collector, and designer specializing in flora ranging from California to South Africa. Curator of Portland's Lan Su Chinese Garden, Hogan was former Director of Collections for Portland's Hoyt Arboretum and a curator at the UC Berkeley Botanical Garden. Author of *Flora: A Gardener's Encyclopedia* and *Trees for All Seasons: Broadleaf Evergreens for Temperate Climates*, Hogan has contributed extensively to Apple Park in Cupertino, California, and designed public and private gardens on the West Coast and beyond.

**March 26 | 203GAR801D**



Registration fee for each lecture: \$32/\$35. Register for the series and receive a discount: 203GAR801A | \$85/\$95 [CEUs](#)

FUNDED IN PART BY THE BARBARA CUSHING PALEY FUND.

## Climate Week NYC at NYBG

### *FALTER: A Conversation with Bill McKibben*

Thursday, September 26, 10–11 am  
Ross Hall, NYBG



©Nancie Battaglia

Bill McKibben's groundbreaking 1989 classic, *The End of Nature*, first brought the idea of global warming to public consciousness. But now the

stakes are even higher—as climate change shrinks the spaces where civilization can exist, and technologies such as artificial intelligence and robotics threaten the nature of human experience. McKibben has responded with *Falter: Has the Human Game Begun to Play Itself Out?*, a powerful and sobering look at these converging trends, the ideological passions that prevent us from controlling them, and some possible ways out of the trap. Audience Q&A and book signing to follow.

*“An essential book—honest, far-reaching and, against the odds, hopeful.”*

— Elizabeth Kolbert

**Bill McKibben** is the founder of the environmental organization 350.org, the first global citizen movement to combat climate change. He has authored 15 books, is the Schumann Distinguished Scholar in Environmental Studies at Middlebury College and has received the Right Livelihood Award—sometimes called the “alternative Nobel”—and the Sierra Club’s John Muir Award.

201BOT807 | \$10/\$20

## *A Call to Action: Protecting Earth’s Biodiversity*

Friday, November 15, 10 am–12:30 pm | Ross Hall, NYBG



A recent UN report predicts that climate change, invasive species, pollution, and other anthropogenic disturbances will have a disastrous effect on biodiversity worldwide. Any careful observer of nature in our region has witnessed significant changes to our local flora over the past few decades. Beloved wildflowers are vanishing from our forests and native trees are succumbing to deer, drought, and disease. However, all is not lost! Nature lovers, gardeners, and scientists are joining together to battle invasive species and preserve and restore populations of the native plants that define our region’s distinct ecological character. Join us to learn about what we can all do to help protect our imperiled biodiversity.



### **Doug Tallamy: A Guide to Restoring the Little Things that Run the World**

Doug Tallamy, professor and award-winning author, reminds us of the many essential roles insects play in our ecosystems, and encourages us to make simple changes in our landscapes and our attitudes to keep insects on the ground, in the air, and yes, on our plants.



### **Randy Westbrook: A Land Conservation Challenge for the 21st Century**

Invasive species specialist Randy Westbrook presents successful case studies that illustrate how effective the early detection and rapid response model can be to eradicate invasive species and prevent their spread.



### **Get Involved: Case Studies from Lower Hudson PRISM**

Be part of the change! There are 50 PRISM partners in our area who are working hard to prevent and manage invasive species every day. In a rapid-fire series of presentations, four partners, including Carolynn Sears, Ph.D., Co-Director of The Invasives Project in Pound Ridge, N.Y., will share their success stories and show how you can help.

202HRT839 | \$25/\$29 | For session details, CEUs, and instructor bios visit our website.



This project was contracted by the Lower Hudson Partnership for Regional Invasive Species Management using funds from the Environmental Protection Fund as administered by the New York State Department of Environmental Conservation

## Sustainability Intensive—A One-Week Workshop

Creating and maintaining healthy, beautiful landscapes that minimize fertilizers, water, pesticides, and time is the aim of every forward-thinking contemporary gardener or designer.

Developed by NYBG’s Horticulture Department and School of Professional Horticulture, this five-day in-depth and interactive sustainability workshop provides a comprehensive, real-world overview of current best horticultural practices for our region.

Ten sessions over 5 days, taught by regional experts combine field lectures, classroom case studies, and Garden site tours for a firm foundation in ecological design and sustainable practice.

Raise your game with informed principles and practical solutions for managing soil, water, pest, and plants. **For session details, CEUs, and instructor bios visit our website.**

Monday–Friday, September 30–October 4, 9 am–3 pm | \$695/\$795 | NYBG | 201HRT490

©Jeffrey Falk



## *Sir Robert Watson: Saving a Livable World*

### ANDREW CARNEGIE DISTINGUISHED LECTURE

Thursday, October 10, 6 pm | Christie's, 20 Rockefeller Plaza, NYC

Last May the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) published its comprehensive, landmark report on the state of our natural world—and its implications for species, ecosystems, and society are dire.

Vital ecosystems are deteriorating more rapidly than ever. One million species face extinction if we do not act now to conserve and sustainably use biodiversity. We are eroding the very foundations of our economies, livelihoods, food security, health, and quality of life. And if transformative change is not well under way in the next few years, biodiversity will continue to be lost, Earth's climate will continue to change, and most of the UN Sustainable Development goals will be unobtainable.

Sir Robert Watson, who chaired the IPBES report, will share its crucial findings, then be joined by renowned conservation biologist Thomas Lovejoy for a compelling conversation on biodiversity loss and current progress on global goals.

*“The best available evidence points to a single conclusion: We must act to halt and reverse the unsustainable use of nature or risk not only the future we want but even the lives we currently lead.”*

— Sir Robert Watson



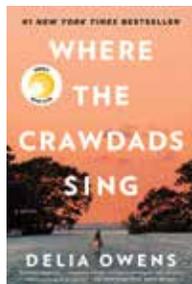
**Professor Sir Robert Watson** has been Chief Scientist and Director for Environmentally and Socially Sustainable Development at the World Bank and Associate Director for Environment in the Office of Science and Technology Policy in the Executive Office of the President in the White House. He has received many national and international awards for his contributions to science.

Complimentary for Garden Patrons  
202GAR817 | \$25/\$29

Support has been provided by Carnegie Corporation of New York.  
This event is generously hosted by Christie's.

## Delia Owens: *Where the Crawdads Sing*

Monday, September 16, 6:30 pm | Ross Hall, NYBG



*Where the Crawdads Sing*, the lyrical and gripping debut novel by Delia Owens, has taken the publishing world—and the reading public—by storm, spending a year on the *NY Times Best Seller List*, with months at #1. Through the eyes of a young girl abandoned by her family in the North Carolina marshland, Owens masterfully weaves a celebration of nature, a heartbreaking coming-of-age story, and a riveting murder mystery with clues brushed into the lush habitat and natural histories of its wild creatures.

Don't miss this captivating storyteller's first New York public appearance, followed by an audience Q&A and booksigning.

201NAT902 | \$25/\$29 SOLD OUT

## *The Earth in Her Hands*

### Jamaica Kincaid in Conversation with Jennifer Jewell

Friday, March 13, 11 am–12:30 pm  
Ross Hall, NYBG



©Rob Woolmington

Award-winning Caribbean-American writer **Jamaica Kincaid** is best known for her evocative portrayals of family relationships, interwoven with themes of the colonial legacy, gender, race, and class. But she is also a passionate and perceptive gardener, who has expanded the scope of garden writing in her essays and memoirs, including *My Garden (Book)* and *Among Flowers: A Walk in the Himalaya*. Don't miss a rare opportunity to hear one of our finest writers talk about one of her greatest loves, when Kincaid joins NPR host Jennifer Jewell for a penetrating conversation about gardens, the plants that fill them, and the persons who tend them.



**Jennifer Jewell** is creator, writer, and host of public radio's *Cultivating Place*. In her new book, *The Earth in Her Hands* (Timber Press, 2020), she includes Jamaica Kincaid in her profiles of 75 accomplished women—from a wide range of ages, background, and careers—who have all made lasting contributions in the wide world of plants.

203HRT840 | \$25/\$29

# Botanical Art & Illustration



©Shari Blaukopf, *Perennial Garden*, Watercolor

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. Those who achieve the highest level of accomplishment receive a Certificate in Botanical Art & Illustration with Honors, an indication of superior work.

During the course of the program, students will:

- Acquire skills in drawing and/or painting accurately and beautifully.
- Develop techniques needed to re-create amazing detail, natural color, and convincing form.
- Gain knowledge of basic morphological features of plants.
- Learn elements of successful composition—whether for scientific illustration or fine artwork.
- Through electives, learn the history of botanical art, and explore various specialty subjects.
- Develop a personal aesthetic and a strong artistic identity.
- Enjoy access to the exceptional collection of botanical art in the Garden's LuEsther T. Mertz Library.

## STUDENT INFORMATION

### CLASS MATERIAL:

A materials list for every class is included in the course description on our website and in your confirmation email. Please bring lunch to classes meeting all day.

### 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 2020 the final project due date is April 24, 2020. 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 from the Registration Office.



The Program Coordinator, Robin A. Jess, is the Assistant to the Executive Director of the American Society of Botanical Artists. Robin was a freelance illustrator for 15 years at NYBG with Dr. Arthur Cronquist, an internationally recognized leader in the field of plant systematics, as well as the founding Coordinator of the Botanical Art & Illustration Certificate Program. Robin was a presenter at the 2017 Korean National Arboretum International Symposium and is a contributing artist in the National Tropical Botanical Garden, Kauai Florilegium Society.

**Robin A. Jess**, Program Coordinator  
**Laura Vogel**, Program Advisor

**QUESTIONS? CONTACT PROGRAM COORDINATOR ROBIN JESS AT [BILCOORDINATOR@NYBG.ORG](mailto:BILCOORDINATOR@NYBG.ORG)**

## Tri-State Botanical Artists of NYBG



TSBA is a lively group of more than 40 artists who meet to engage in critiques, monthly art challenges, a sketchbook exchange, and topical discussions. We invite all current Certificate students and alumni to join us! TSBA is recognized as an ASBA Circle. Meetings are free and held once a month at NYBG. See p. 59 for more information.

Illustration: Apple III, ©Carrie Di Costanzo, NYBG Instructor



### 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 (in Recommended Order)	Code	Hours	Page
Botanical Drawing I: Methods and Materials	BIL 301	18	9
Botanical Drawing II: Developing Your Skills	BIL 302 <span style="color: green;">P</span>	18	9
The Basics of Visual Composition (should be completed early)	BIL 421 <span style="color: green;">P</span>	18	10
Botanical Drawing III: Focus on Flowers	BIL 303 <span style="color: green;">P</span>	18	9
Plant Morphology for Botanical Artists	BIL 300 <span style="color: green;">P</span>	20	9
Botanical Watercolor I	BIL 331 <span style="color: green;">P</span>	24	9
Practical Aspects of Botanical Art	BIL 392 <span style="color: green;">P</span>	10	10
<i>Plus one of the following:</i>			
Internet Tools for Creatives, Part I: Social Media	BIL 394	5	10
Internet Tools for Creatives, Part II: Website	BIL 395	7	10
Pen and Ink	BIL 400 <span style="color: green;">P</span>	18	10
Colored Pencil	BIL 415 <span style="color: green;">P</span>	18	9
<i>Elective courses</i>		54	
<b>TOTAL REQUIRED HOURS</b>		<b>221***</b>	

### 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 students to tailor their direction of study.

Course	Code	Hours	Page
Birds Nests in Silverpoint	BIL 351 <span style="color: green;">P</span>	12	10
Branches and Berries in Color	BIL 327 <span style="color: green;">P</span>	8	11
Botanical Watercolor II	BIL 332 <span style="color: green;">P</span>	18	10
Flowers in Colored Pencil and Watercolor	BIL 397 <span style="color: green;">P</span>	10	11
Drawing Shorebirds and Wading Birds	BIL 353 <span style="color: green;">P</span>	15	11
Fabulous Ferns	BIL 344 <span style="color: green;">P</span>	18	11
Lichens	BIL 386 <span style="color: green;">P</span>	10	11
Feathers and Fur	BIL 322 <span style="color: green;">P</span>	12	11
Texture Building with Asuka Hishiki	BIL 489 <span style="color: green;">P</span>	10	11
Painting Petals with Vincent Jeannerot	BIL 494 <span style="color: green;">P</span>	15	11
Ink Wash Techniques	BIL 407 <span style="color: green;">P</span>	15	11

\*\*\*Plus a final project that meets Certificate standards

P Courses with a prerequisite before you can register

### BOTANICAL WATERCOLOR FOR BEGINNERS AND BEYOND

Enjoy painting botanical watercolors in a relaxed atmosphere. This class is designed for both inexperienced students and those who wish to improve their skills. Sign up for one section, or several! Lectures and demonstrations are enhanced by individual instruction. Work at your own pace on a variety of pieces.

5 Mondays, 9/16–10/28 (no class 9/30 & 10/14),  
10 am–2:30 pm

Laura Vogel | Manhattan | 201BIL140C

5 Mondays, 11/4–12/9 (no class 11/11),  
10 am–2:30 pm

Laura Vogel | Manhattan | 202BIL140A

5 Sundays, 11/10–12/15 (no class 12/1),  
10 am–2:30 pm

Laura Vogel | NYBG | 202BIL140B

5 Mondays, 1/6–2/10 (no class 1/20),  
10 am–2:30 pm

Laura Vogel | Manhattan | 203BIL140C

5 Saturdays, 2/1–3/7 (no class 2/15), 10 am–2:30 pm

Laura Vogel | NYBG | 203BIL140D

5 Mondays, 3/9–4/6, 10 am–2:30 pm

Laura Vogel | Manhattan | 203BIL140E

\$345/\$379

### BOTANICAL DRAWING FOR BEGINNERS

Do you ever wish you could capture the details of a plant long after you've seen it? This intro class teaches you how to make realistic drawings of plants using a variety of techniques. Learn to draw a selection of plant parts, including branches, stems, leaves, and flowers, for pleasure or to expand your drawing skills.

4 Tuesdays, 9/17–10/8, 10 am–1 pm

Sarah Wry | NYBG | 201BIL145C

4 Wednesdays, 9/25–10/23 (no class 10/9), 6–9 pm

Katy Lyness | Manhattan | 201BIL145D

4 Saturdays, 12/7–1/11 (no class 12/21 & 12/28),  
10 am–1 pm

Mary Christiansen | NYBG | 202BIL145A

4 Wednesdays, 2/5–2/26, 10 am–1 pm

Linda Nemer gut | NYBG | 203BIL145B

4 Tuesdays, 3/3–3/31 (no class 3/17), 5:30–8:30 pm

Rose Marie James | Manhattan | 203BIL145C

\$229/\$249

### CAPTURING THE CHARACTER OF TREES

Explore special drawing techniques and create dynamic compositions that capture the nature and “personality” of NYBG’s exquisite specimen trees. From a weeping willow to a sturdy oak, trees all have defining characteristics. Frank Guida will take you *en plein air* to try your hand at depicting the essence of trees. Please dress for the outdoors.

Friday, 10/4 (Rain date 10/18), 10 am–3 pm

Frank Guida | NYBG | 202BIL205

\$95/\$105

### 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 plant parts and growth stages of the most common plant families.

■ Prerequisite: *Botanical Drawing I*

8 Wednesdays, 10/16–12/11 (no class 11/27),  
10 am–12:30 pm  
Dick Rauh | NYBG | 202BIL300A

5 Saturdays, 2/1–3/7 (no class 2/15), 10 am–2 pm  
Robin Jess | Manhattan | 203BIL300B

\$495/\$545 *Certificate Requirement*

### 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.

5 Fridays, 9/13–10/18 (no class 10/4), 10 am–1:35 pm  
Kathie Miranda | NYBG | 201BIL301C

6 Tuesdays, 9/17–10/29 (no class 10/8), 6–9 pm  
Katy Lyness | Manhattan | 201BIL301D

6 Wednesdays, 1/8–2/12, 6–9 pm  
Kathie Miranda | Manhattan | 203BIL301A

6 Thursdays, 1/9–2/13, 10 am–1 pm  
Linda M. Nemergut | NYBG | 203BIL301B

\$435/\$479 *Certificate Requirement*

### BOTANICAL DRAWING II: DEVELOPING YOUR SKILLS

Building on *Botanical Drawing I* skills, learn to tone fruit, vegetables, leaves, and branches. Focus on concepts of light source, value, and shading to create form. Learn to translate color into black and white, and create the illusion of depth and space in your work. ■ Prerequisite: *Botanical Drawing I*

5 Fridays, 11/8–12/13 (no class 11/29), 10 am–1:40 pm  
Rose Marie James | NYBG | 202BIL302A

6 Tuesdays, 11/12–12/17, 6–9 pm  
Katy Lyness | Manhattan | 202BIL302B

6 Wednesdays, 3/4–4/8, 6–9 pm  
Kathie Miranda | Manhattan | 203BIL302C

6 Thursdays, 3/5–4/9, 10 am–1 pm  
Linda M. Nemergut | NYBG | 203BIL302D

\$435/\$479 *Certificate Requirement*

### BOTANICAL DRAWING III: FOCUS ON FLOWERS

Apply your understanding of contours, perspective, and tone to drawing three distinct types of flowers. The object is to accurately draw a fully toned flowering plant. Explore compositional possibilities, textures, and details. ■ Prerequisite: *Botanical Drawing II*

6 Thursdays, 9/12–10/17, 6–9 pm  
Rose Marie James | Manhattan | 201BIL303C

6 Fridays, 1/10–2/14, 10 am–1 pm  
Rose Marie James | NYBG | 203BIL303A

\$435/\$479 *Certificate Requirement*

### COLORED PENCIL

Colored pencil line and tone can be applied to look like either drawing or painting, making it a versatile medium for creating botanical artwork. Focusing on color theory and application, you'll learn a variety of techniques, including burnishing, tonal construction, and how to layer colors to achieve different hues and color densities. ■ Prerequisite: *Botanical Drawing II*

6 Saturdays, 9/14–10/26 (no class 10/12), 10 am–1 pm  
Laura Vogel | NYBG | 201BIL415B

6 Thursdays, 2/6–3/12, 6–9 pm  
Jeanne Reiner | Manhattan | 203BIL415A

\$435/\$479 *Certificate Requirement*

### BOTANICAL WATERCOLOR I

This comprehensive class covers the basic techniques of botanical watercolor. Learn how to use your brushes to make smooth, underlying washes, as well as to create fine detail. Color theory will teach you how paints interact, and how to select the right colors for your subject. Paper selection, transferring preliminary drawings, and more will round out this strong foundation for successful watercolor paintings. ■ Prerequisite: *Botanical Drawing II*

8 Mondays, 9/16–11/25 (no class 9/30, 10/14 & 11/11), 6–9 pm  
Rose Marie James | Manhattan | 201BIL331B

8 Thursdays, 9/26–11/14, 10:30 am–1:30 pm  
Laura Vogel | NYBG | 201BIL331C

8 Mondays, 2/10–4/6 (no class 2/17), 10 am–1 pm  
Rose Marie James | NYBG | 203BIL331A

\$569/\$625 *Certificate Requirement*



Illustration: Australian Eucalyptus, *Eucalyptus cladocalyx*, ©Rose Marie James, NYBG Instructor



CALL FOR ENTRIES:

## *The Fourth NYBG Triennial*

**Abundant Future: Cultivating  
Diversity in Garden, Farm,  
and Field**

Co-presented with the American  
Society of Botanical Artists

NOVEMBER 28, 2020–APRIL 4, 2021  
Arthur and Janet Ross Gallery

The theme of the Fourth New York Botanical Garden Triennial will be heirloom plants and crop diversity, inviting artists to capture images of one of Earth's most precious resources.

Featured will be heirloom plants and their wild relatives that are important to human survival. Throughout history, humans have generated a nearly endless variety of diversity in plants through breeding, providing the wide variety we are accustomed to such as tomatoes, apples, corn, potatoes, beans, and berries. However, modern domesticated crops have lost traits that can help them resist changing climate, environmental stresses, and susceptibility to disease. This exhibition will highlight the biological wealth and diversity of genetic material found in heirloom plants and their wild relatives.

**Submission Deadline: May 31, 2020**

For more info visit the ASBA website:  
[asba-art.org](http://asba-art.org)

Illustration: Pears, ©Wendy Hollender, NYBG Instructor

## Weekend watercolor Workshops



Artists of all skill levels will enjoy these one-day workshops dedicated to basic watercolor techniques. In each session, you'll learn to capture the beautiful colors and unique details of a different botanical subject. Photo reference materials will be provided by the instructor in addition to plant material when possible. No previous drawing or painting experience is required.

### NEW! LILIES

Sunday, 9/15, 10 am–3:30 pm  
Sarah Wry | NYBG | 201BIL221

### NEW! TOMATOES

Sunday, 9/22, 10 am–3:30 pm  
Robin Jess | NYBG | 201BIL243

### PLUMS

Sunday, 9/29, 10 am–3:30 pm  
Carrie Di Costanzo | NYBG | 201BIL214

### SUCCULENTS

Saturday, 10/19, 11 am–4:30 pm  
Adele Rossetti | Manhattan | 202BIL233

### FALL LEAVES

Sunday, 10/20, 10 am–3:30 pm  
Laura Vogel | NYBG | 202BIL203

### SEED PODS

Sunday, 11/3, 10 am–3:30 pm  
Carrie Di Costanzo | NYBG | 202BIL223

### NEW! PEPPERS

Saturday, 11/16, 10 am–3:30 pm  
Laura Vogel | NYBG | 202BIL259

### NEW! AMARYLLIS

Saturday, 1/25, 11 am–4:30 pm  
Adele Rossetti | Manhattan | 203BIL224

### NEW! IRISES

Sunday, 1/26, 10 am–3:30 pm  
Laura Vogel | NYBG | 203BIL237

### ORCHID FLOWERS

Sunday, 2/9, 10 am–3:30 pm  
Laura Vogel | NYBG | 203BIL225A

Sunday, 3/22, 10 am–3:30 pm  
Laura Vogel | NYBG | 203BIL225B

**Registration fee for each section: \$95/\$105**

### 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. It is recommended that students take *Botanical Watercolor II* immediately following *Botanical Watercolor I*.  Prerequisite: *Botanical Watercolor I*

6 Mondays, 12/2–1/27 (no class 12/23, 12/30, & 1/20), 5:30–8:30 pm  
Rose Marie James | Manhattan | 202BIL332

\$435/\$479 *Certificate Elective*

### PEN AND INK

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

 Prerequisite: *Botanical Drawing II*

4 Tuesdays, 1/7–1/28, 10:30 am–3:30 pm  
Laura Vogel | NYBG | 203BIL400

\$435/\$479 *Certificate Requirement*

### PRACTICAL ASPECTS OF BOTANICAL ART

Whether or not you decide to pursue botanical art as a business, knowing standard practices will be useful. In these two sessions, you will learn the basics of dealing with galleries and artists' reps, including pricing, contracts and sales agreements; how/when to sell certain rights, how to market your work including best options for promotional printing (business cards, exhibition postcards, booklets) and making products, as well as licensing. How to prepare for entering an exhibition or developing your own one-person show will round out the concepts.  Prerequisite: *Watercolor or Colored Pencil*

2 Fridays, 2/21 & 2/28, 11 am–4:30 pm  
Carol Woodin | NYBG | 203BIL392

\$245/\$269 *Certificate Requirement*

### INTERNET TOOLS FOR CREATIVES PART I: SOCIAL MEDIA

Learn how to use Facebook, Instagram, Twitter, and Pinterest to showcase your work. Define your goals for using social media as a marketing tool, and create a strategy to achieve those goals. Discover tips for attracting and engaging followers. Basic smartphone fluency is recommended. If possible, please bring a smartphone with the aforementioned apps pre-downloaded.

Saturday, 1/11, 10 am–3:30 pm  
Candace Thompson | NYBG | 203BIL394

\$115/\$129 *Certificate Requirement*



### INTERNET TOOLS FOR CREATIVES PART II: WEBSITE

Having a professional online presence is essential to getting the word out about your work. In this hands-on class, you will build a simple website (no coding required!) to showcase your portfolio using Wix.com, a free and easy-to-use platform. We will also showcase free online photo-editing tools. Basic familiarity with internet navigation is expected. Bring a laptop and 10–15 digital images of you, your studio, and your work to use in building your new site.

2 Saturdays, 1/25 & 2/1, 11 am–2:30 pm  
Candace Thompson | NYBG | 203BIL395

\$155/\$169 *Certificate Requirement*

### THE BASICS OF VISUAL COMPOSITION

To create a memorable work of art, you must carefully position your subjects on the page. Using a variety of exercises, we'll experiment with a wide range of principles, including balance, focal points, and the rule of thirds, that will help your composition achieve maximum visual impact. Each week, you'll add to your personal composition notebook, which will serve as an invaluable reference in the future. You'll create one final drawing to pull together everything we explored together. This class is best taken early in your Certificate program.

 Prerequisite: *Botanical Drawing II*

4 Saturdays, 2/8, 2/22, 3/14 & 3/28, 10 am–3 pm  
Betsy Rogers-Knox | NYBG | 203BIL421

\$449/\$495 *Certificate Requirement*

### BIRD NESTS IN SILVERPOINT

The intricate beauty of a bird's nest really shines when drawn in silverpoint, especially as the silver develops a soft patina over time. Using a silver wire held in a stylus, master an organic approach to drawing a complex subject. Learn to prepare the substrate, develop a skillful handling of the drawing material, and add touches of color to the finished drawing. BYOB.  Prerequisite: *Botanical Drawing II*

3 Wednesdays, 9/11–9/25, 10 am–2:30 pm  
Linda M. Nemergut | NYBG | 201BIL351

\$285/\$315 *Certificate Elective*

Illustration top left: Iris (detail), ©Carrie Di Costanzo, NYBG Instructor  
Illustration top right: Osage Orange, *Maclura pomifera*, *Botanical Art Worldwide: America's Flora*, ©Susan Tomlinson

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

**NEW! BRANCHES AND BERRIES  
IN COLOR**

Working with seasonal specimens such as holly, winterberry, and Chinese lantern, explore creative compositional devices of line, balance, and harmony. Develop skills in painting glowing neutrals, shiny leaves, and deep greens and reds. We'll provide some specimens, though we welcome you to bring ones you've gathered in the field or from your local florist.

📌 Prerequisite: *Drawing II*

3 Saturdays, 11/2–11/16, 10 am–3:30 pm  
Kathie Miranda | Manhattan | 202BIL327

\$359/\$395 *Certificate Elective*

**NEW! FLOWERS IN COLORED PENCIL  
AND WATERCOLOR**

Dream of 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 splendid flowers in bloom. 📌 Prerequisite: *Botanical Drawing I*

Wednesday–Friday, 12/4–12/6, 10 am–4 pm  
Wendy Hollender | NYBG | 202BIL397

\$395/\$435 *Certificate Elective*

**NEW! LICHENS**

Capture the subtle colors and nearly infinite texture of lichens. You'll explore their nature and history, and use dissecting microscopes to examine their minute detail. Learn to accurately render lichens irregular structures. We will also discuss how best to include the substrate in your work, be it tree bark, a fence post, or a boulder. 📌 Prerequisite: *Plant Morphology for Botanical Artists*

2 Wednesdays, 1/22 & 1/29, 10 am–3:30 pm  
Dick Rauh | NYBG | 203BIL386

\$239/\$265 *Certificate Elective*

**NEW! DRAWING SHOREBIRDS AND  
WADING BIRDS**

Observe the anatomy, gestures, and behavioral habits of water birds, while learning techniques to paint their vivid plumage and distinctive markings. Classes will cover composition and light on form, along with approaches to rendering reflections on water. While working primarily from photographs, we will cover tips for sketching in the field as well.

📌 Prerequisite: *Botanical Drawing II*

4 Tuesdays, 2/4–2/25, 10 am–1 pm  
Mary Christiansen | NYBG | 203BIL353

\$285/\$315 *Certificate Elective*

**IN-PROGRESS PORTFOLIO CRITIQUE**

As a developing artist, you need personalized, supportive evaluation to improve your techniques. This is your chance to bring your finished art and work-in-progress for respectful, careful feedback via group discussion and teacher-led demos. We'll pay special attention to your ability to convey the intricacy of your subject. Are your details complete? Are your tonal values correct? Works in colored pencil, graphite, or watercolor are welcome. This class is highly recommended for Portfolio candidates.

Wednesday, 2/19, 10 am–3:30 pm  
Robin Jess | NYBG | 203BIL208

\$119/\$129

**FABULOUS FERNS**

From the fiddlehead to the frond, ferns have a charm all their own. In the studio you'll examine some of their special adaptations and growth patterns, then use your graphite pencil or pen and ink to create graceful images of different genera in this beautiful and varied group. Final project will be in the medium of your choosing.

📌 Prerequisite: *Botanical Drawing I*

3 Sundays, 3/1–3/15, 10 am–3:30 pm  
Dick Rauh | NYBG | 203BIL344

\$359/\$395 *Certificate Elective*

**NEW! INK WASH TECHNIQUES**

If you wish to transition from drawing to watercolor painting techniques or fine tune your watercolor skills, this class is for you. Sessions will focus on demonstration and practice of basic techniques such as flat washes, glazing, graded washes and dry brush for fine details. Dilutions of India ink and earth tone inks will be used to depict botanical and natural science subjects. Bring samples of your drawings to the first class. Please bring lunch.

📌 Prerequisite: *Botanical Drawing II*

3 Wednesdays, 3/18–4/1, 10 am–3:30 pm  
Laura Vogel | NYBG | 203BIL407

\$359/\$395 *Certificate Elective*

**NEW! FEATHERS AND FUR**

Develop advanced graphite techniques for rendering the overlapping linear texture, pattern, and density found in feathers and furs. We will explore drawing with an eraser and using negative space. Please bring your own collection or photos to draw. Instructor will provide fur samples for in-class use. 📌 Prerequisite: *Botanical Drawing II*

3 Saturdays, 3/21, 4/4, & 4/18, 10 am–3:30 pm  
Kathie Miranda | Manhattan | 203BIL322

\$359/\$395 *Certificate Elective*

# Visiting Artists

**Special workshops with Asuka Hishiki from Japan and Vincent Jeannerot from France**

**TEXTURE BUILDING WITH ASUKA HISHIKI**

Internationally renowned botanical artist Asuka Hishiki returns to the Garden to show you how to build texture quickly by combining watercolor and colored pencil. Less time consuming than her signature dry brush technique, this method highlights textures and patterns to masterful effect. You'll concentrate on one seasonal botanical subject as you hone your skills.

📌 Prerequisite: *Botanical Watercolor I*

Saturday & Sunday, 11/2–11/3, 10 am–4 pm  
Asuka Hishiki | NYBG | 202BIL489

\$445/\$489 *Certificate Elective*

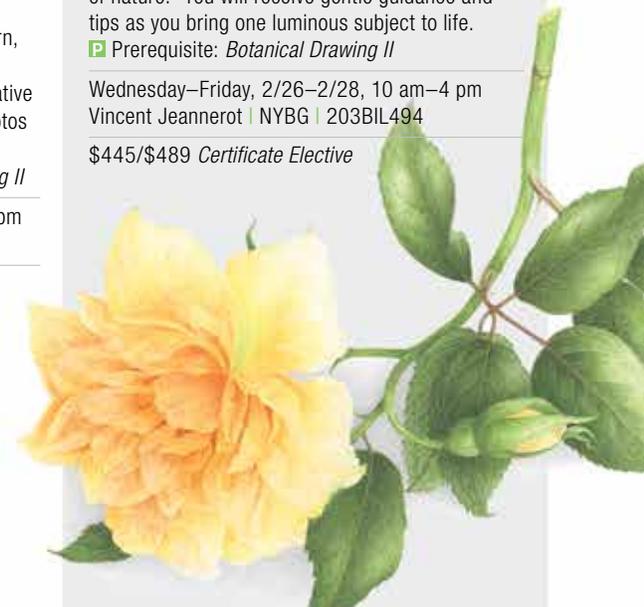
**PAINTING PETALS WITH VINCENT  
JEANNEROT**

World-renowned botanical watercolorist Vincent Jeannerot will share techniques for painting the exuberant beauty of flowers bursting with petals. Learn to capture the depth and nuance of your subject and how to evoke an emotional response in the viewer, a process that Vincent says “requires humility and self-denial in the face of the beauty of nature.” You will receive gentle guidance and tips as you bring one luminous subject to life.

📌 Prerequisite: *Botanical Drawing II*

Wednesday–Friday, 2/26–2/28, 10 am–4 pm  
Vincent Jeannerot | NYBG | 203BIL494

\$445/\$489 *Certificate Elective*



# Botany



©James Gurney, *Cinnamon Fern*, Gouache

Do you have a desire to get closer to nature? Take a botany class and gain a deeper understanding of how plants connect us to the natural world. Botanical studies explore all aspects of plant growth and development, plant communities, and the role of plants in ecosystems. At the everyday level, botany can be your gateway to herbal healing, foraging for wild edibles, cross-cultural understanding, or just a deeper appreciation of nature's seasonal beauty.

## THE CERTIFICATE PROGRAM

The NYBG Botany Certificate Program is designed to deepen a student's scientific understanding of the plant kingdom. Engage in subjects such as native flora, ethnobotany, ecology, and botanical nomenclature. Courses reflect the Garden's strengths in botanical science research, as well as its world-famous and unequalled resources—the William and Lynda Steere Herbarium, housing 7.8 million dried plant specimens, and the LuEsther T. Mertz Library, with its collection of more than 550,000 volumes, nearly 12,000 serial titles, and over 11 million archival documents.

During the course of the program, students will come to know plants: how they 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	15
Plant Physiology	BOT 316 <b>P</b>	21	15
Plant Diversity	BOT 317 <b>P</b>	24	15
Dendrology: Woody Plant Identification**	BOT 375	15	—
Herbaceous Plant Identification**	BOT 376	15	—
<i>One of the four Native Flora courses:</i>		12	—
Native Flora in Autumn	BOT 331		15
Native Flora in Winter	BOT 332		15
Native Flora in Spring**	BOT 333		—
Native Flora in Summer**	BOT 334		—
<i>Elective Courses (See current electives below)</i>		58	
<b>TOTAL REQUIRED HOURS</b>		<b>169</b>	

### ELECTIVES

Course	Code	Hours*	Page
Nature's Pharmacy	BOT 346	4	14
Systematic Botany	BOT 432 <b>P</b>	21	15
Grasses, Sedges, and Rushes	BOT 319	4	14
Botanical Latin	GAR 360	10	14
Autumn Mushrooms	BOT 368	6	14
Ferntastic!	BOT 312	4	14
Pressing Plants for Art & Science	BOT 338	12	14
Lichens Revealed	BOT 388	9	14
The Science of Tree Communication	BOT 385	6	14
Winter Mushrooms	BOT 394	6	15
The Hidden World of Lichens	BOT 313	3	14
Psychedelic Mushrooms	BOT 302	1.5	15
What Tree Rings Reveal about Climate Change	BOT 397	3	15
Morphology of Flowering Plants	BOT 431	16	15

\*Course hours do not include exam hours

\*\*Courses offered in the Spring–Summer Catalog

**P** Courses with a prerequisite before you can register



The Program Coordinator, Jamie Boyer, Ph.D., Stavros Niarchos Foundation Vice President for Children's Education, teaches Adult Education courses in plant structure and diversity, and paleobotany. At NYBG, he is responsible for overseeing all aspects of the Garden's youth, teacher, and family education programs. He holds a Ph.D. in Plant Biology from the State University of New York Binghamton, where he studied the evolution and development of ancient land plants.

**QUESTIONS? CONTACT PROGRAM COORDINATOR JAMIE BOYER, PH.D., AT [JBOYER@NYBG.ORG](mailto:JBOYER@NYBG.ORG)**

*"I often wish I'd studied botany in college but life took me on a different path and I became a journalist. Then, in a twist of fate, I changed careers to help lead a nature conservation foundation. I wanted to put plants front and center of my focus and needed a solid grounding in botanical science. Enter NYBG's Botany Program. I've learned a tremendous amount from the fabulous instructors and I'll never stop taking classes here!"*

—CLARK MITCHELL, 2019 Graduate



**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.

5 Wednesdays, 9/25–10/30 (no class 10/9),  
10:30 am–12:30 pm

Jennifer Bakshi | NYBG | 201GAR360A

5 Thursdays, 10/24–11/21, 6:15–8:15 pm

Jennifer Bakshi | Manhattan | 202GAR360B

5 Thursdays, 1/16–2/13, 10:30 am–12:30 pm

Jennifer Bakshi | NYBG | 203GAR360A

5 Mondays, 3/9–4/6, 6:15–8:15 pm

Jennifer Bakshi | Manhattan | 203GAR360C

\$255/\$279 *Certificate Elective*

**BASIC PLANT ID**

Are you a plant-lover eager to up your game and start distinguishing one species from another? Then this is the class for you! Using commonly known plants, you'll learn the terminology used to describe their growing habits and structures. This vocabulary will help you recognize and describe key differences in plant forms, from roots to fruit. We'll also cover basic botanical nomenclature.

2 Tuesdays, 9/17 & 9/24, 5–8 pm

Katie Bronson | NYBG | 201BOT308A

2 Wednesdays, 3/11 & 3/18, 5–8 pm

Elle Barnes | Manhattan | 203BOT308B

\$145/\$159

**NATURE'S PHARMACY**

For centuries herbs and spices have been prized not just for their flavors, but as state-of-the-art medicine. Learn about a variety of plants historically used for first aid, to revitalize the immune system, and to treat and prevent asthma, insomnia, sinusitis, bronchitis, colds, and flu, and much more. Join us—you'll be a much smarter shopper on your next visit to the health-food store! Please bring lunch.

Saturday, 9/21, 10 am–2:30 pm

Amy Anthony | Manhattan | 201BOT346A

Saturday, 1/25, 10 am–2:30 pm

Amy Anthony | Manhattan | 203BOT346B

Sunday, 3/1, 10 am–2:30 pm

Andrea Candee | NYBG | 203BOT346C

\$115/\$125 *Certificate Elective*

**NEW! GRASSES, SEDGES, AND RUSHES**

This group of plants challenges even trained botanists, but with expert guidance, you can learn how to identify wild native grasses and some of the more popular landscaping ones. Sedges (Cyperaceae) and rushes (Juncaceae), often confused with grasses (Poaceae), are included. Please bring lunch and dress for the weather.

Sunday, 9/22, 10 am–2:30 pm

Regina Alvarez | NYBG | 201BOT319

\$89/\$95 *Certificate Elective*

**FERNTASTIC!**

In habitats from the tropics to the poles, the world's 14,000 ferns, horsetails, quillworts, and clubmosses are dynamic and remarkable. Robbin Moran, Nathaniel Lord Britton Curator of Botany, is your guide to this unique family of plants. Take a microscopic look at spores being catapulted from their cases, and learn to identify species of common ferns on Garden grounds. Dress for the weather.

Friday, 9/20, 9 am–1 pm

Robbin Moran, Ph.D. | NYBG | 201BOT312

**THE HIDDEN WORLD OF LICHENS**

Lichens are among Earth's most amazing and oldest living things, and display incredibly beautiful colors and shapes. They grow on bark, rock, and barren soil, and thrive in rain forests, deserts, the arctic—even environments simulating Mars! Lichens are sensitive environmental indicators, yet scientists are only just beginning to understand them. Join noted NYBG lichenologist James Lendemer for a captivating session that includes a microscope lab.

Monday, 1/13, 6–9 pm

James Lendemer, Ph.D. | Manhattan  
203BOT313A

Thursday, 2/20, 6–9 pm

James Lendemer, Ph.D. | Manhattan  
203BOT313B

**Each section: \$75/\$85 *Certificate Elective***

**AUTUMN MUSHROOMS**

Here in NYC, fall is the best time to hunt for edible fungi, including honey, oyster, and hen-of-the-woods mushrooms. Paul Sadowski, 25-year veteran of the New York Mycological Society, shows you how to identify many species and their look-alikes, where to find them, and how to cook or preserve them. We'll go mushroom hunting together on Garden grounds, as well as in NYC Parks as the season permits.

2 Tuesdays, 10/1 & 10/8, 10 am–1 pm

Paul Sadowski | Manhattan | 202BOT368A

2 Fridays, 10/18 & 10/25, 10 am–1 pm

Paul Sadowski | NYBG | 202BOT368B

\$145/\$159 *Certificate Elective*

**NEW! LICHENS REVEALED**

Join NYBG lichenologist James Lendemer for an in-depth look at these amazing and important fungi. Use microscopes to observe and distinguish species common in the New York City area. Find out how lichens get their color and how those colors can be used to identify genera and species. Revel in the wondrous beauty of lichens for three sessions that conclude with a chance to use your new skills during a lichen adventure on the Garden grounds.

Wednesday–Friday, 10/2–10/4, 10 am–1 pm

James Lendemer, Ph.D. | NYBG | 202BOT388

\$295/\$325 *Certificate Elective*

**WHAT'S THIS TREE ON MY BLOCK?**

Did you know there are over 200 tree species growing on the streets of Manhattan? Learn to distinguish among the five most common genera and pinpoint particular species in this quick intro to tree identification. If you have mystery trees in your neighborhood, bring photos and we'll identify them together. We'll spend some time outdoors too, so dress for the weather.

Saturday, 11/2, 2–4 pm

James Kaechele | Manhattan | 202BOT223A

Saturday, 2/22, 2–4 pm

James Kaechele | Manhattan | 203BOT223B

\$45/\$55

**THE SCIENCE OF TREE COMMUNICATION**

Trees may appear to be strong and silent, but they can “talk”—to one another, to other plants, and to animals and insects. Discover how trees communicate via chemical signals in the air (to warn each other of insect attacks), as well as through complex fungal networks underground to transfer nutrients and resources to one another (sometimes to assist sick trees).

2 Tuesdays, 12/3 & 12/10, 6–9 pm

Steve Kutos | Manhattan | 202BOT385A

2 Wednesdays, 1/22 & 1/29, 10 am–1 pm

Elle Barnes | NYBG | 203BOT385B

\$125/\$139 *Certificate Elective*

**PRESSING PLANTS FOR ART & SCIENCE**

From the field to the folder, this course covers the essentials of making museum-quality preserved plant specimens suitable for research, education, and decoration. Learn techniques and skills for collecting and preserving plants of your interest, wild or cultivated. Build your own herbarium, useful as a permanent record and study-aid for other Botany and Horticulture courses—or for artistic appreciation.

4 Tuesdays, 1/14–2/4, 4:30–7:30 pm

Daniel Atha and Sheranza Alli | NYBG | 203BOT338

\$365/\$395 *Certificate Elective*

**NEW! WINTER MUSHROOMS**

Even after many plants have begun their long winter's sleep, fungi are still very active. For some species like Velvet Foot and Turkey Tail, winter is high time! Enoki and Oyster Mushrooms can be found in our forests and parks. We'll explore these table favorites in the classroom and in their habitats.

2 Thursdays, 1/23 & 1/30, 10 am–1 pm  
Paul Sadowski | Manhattan | 203BOT394A

2 Tuesdays, 2/11 & 2/18, 10 am–1 pm  
Paul Sadowski | NYBG | 203BOT394B

\$145/\$159 *Certificate Elective*

**NEW! FIVE PLANTS THAT CHANGED THE WORLD**

Yams, pteridophytic ferns, cinchona trees, potatoes, and the American Southern Live Oak have each played a pivotal role in human history, helping to save the world from dire illness and send humans to the moon. Embark on a historical odyssey that uncovers the botany behind how ferns form the foundation for petrochemicals, why tree bark helps slow the spread of malaria, and how yams make modern contraception possible.

Wednesday, 2/26, 10 am–1 pm  
David Saidoff | NYBG | 203BOT207

\$59/\$65

**SYSTEMATIC BOTANY**

Survey the major families of the angiosperms (flowering plants) and learn the characteristics and principles used to classify them. This course covers newly recognized higher order groupings of species, evolutionary trends in reproductive and vegetative structures, and recently reconstructed evolutionary histories (phylogenies) of plants. **P** Prerequisite: *Plant Diversity*

8 Tuesdays, 9/3–10/22, 12:30–3:30 pm  
Lydia Paradiso | NYBG | 201BOT432S

\$495/\$545 *Certificate Elective*

**PLANT STRUCTURE**

Get a solid grounding in the basic plant body, from the cell to the roots, stems, leaves, flowers, and fruits. After an overview of microscope use and fundamental science in the first session, you'll use both dissecting and compound light microscopes to observe plant anatomy. Moving on, we'll introduce the base-level chemistry required for understanding the world of plants.

9 Thursdays, 9/19–11/14, 10 am–1 pm  
Steve Kutos | NYBG | 201BOT315P

9 Mondays, 2/3–4/6 (no class 2/17), 5–8 pm  
Jamie Boyer, Ph.D. | NYBG | 203BOT315S

9 Wednesdays, 1/8–3/4, 6–9 pm  
Steve Kutos | Manhattan | 203BOT315A

9 Thursdays, 3/19–5/14, 5–8 pm  
Nicole Fusco | NYBG | 203BOT315B

\$559/\$615 *Certificate Requirement*

**PLANT PHYSIOLOGY**

The role of plant hormones in growth and development is discussed as well as plant movement, water transport through the plant body, and plant metabolism, including photosynthesis and respiration (anaerobic and aerobic). We will cover the basic chemistry needed to understand plant physiology.

**P** Prerequisite: *Plant Structure*

8 Wednesdays, 9/25–11/20 (no class 10/9),  
5:15–8:15 pm

Regina Alvarez, Ph.D. | NYBG | 201BOT316A

8 Thursdays, 1/9–2/27 (no class 1/23), 5:30–8:30 pm  
Regina Alvarez, Ph.D. | NYBG | 203BOT316S

\$559/\$615 *Certificate Requirement*

**NATIVE FLORA IN AUTUMN**

Autumn is one of the most spectacular times to learn more about the native flora of the Northeast. Goldenrods and asters take center stage at this time of year, but can be difficult to identify. Equipped with a 10X power hand lens, you'll learn to use a plant key to help you identify these plants on the Garden grounds, as well as other wildflowers, shrubs, and trees.

4 Saturdays, 9/28–10/26 (no class 10/12),  
10 am–1 pm

Clara Holmes | NYBG | 201BOT331A

4 Thursdays, 10/10–10/31, 10 am–1 pm  
Nancy Slowik | NYBG | 202BOT331B

\$295/\$325 *Certificate Requirement*

**PLANT DIVERSITY**

Explore the myriad structures and life cycles of the vast diversity of plants, algae, fungi, and bacteria. Delve into the evolutionary reasons behind how and why scientists have divided and classified these organisms. We will also discuss biomes and ecological concepts. **P** Prerequisite: *Plant Structure*

9 Mondays, 10/7–12/16 (no class 10/14 & 11/11) 5–8 pm  
Jamie Boyer, Ph.D. | NYBG | 202BOT317A

\$559/\$615 *Certificate Requirement*

**NATIVE FLORA IN WINTER**

Learn to recognize the characteristics of native and common woody plants in the winter. While in their dormant, leafless state, trees and shrubs can be identified by bud types, leaf scars, fruit remnants, and other distinguishing marks. Specimens examined in class are supplemented by forays on grounds.

4 Fridays, 1/10–1/31, 10 am–1 pm  
Nancy Slowik | NYBG | 203BOT332

\$295/\$325 *Certificate Requirement*

**MORPHOLOGY OF FLOWERING PLANTS**

Angiosperms (flowering plants) are the dominant plants in most of the world's habitats today. Through laboratory demonstrations and dissections, examine the morphology of flowers, fruit, and vegetative plant parts and learn about their structural development.

**P** Prerequisite: *Plant Structure*

6 Mondays, 3/9–4/13, 12–3:10 pm  
Regina Alvarez | NYBG | 203BOT431S

\$395/\$435 *Certificate Elective*

**NEW! PSYCHEDELIC MUSHROOMS**

Discover the power, the allure, and the science of 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., as well as the efforts underway to decriminalize and utilize them in therapeutic practice.

Thursday, 12/5, 11 am–12:30 pm  
Eugenia Bone | NYBG | 202BOT302A

Monday, 2/24, 6:30–8 pm  
Eugenia Bone | Manhattan | 203BOT302B

\$75/\$85 *Certificate Elective*

**NEW! THE OPIUM POPPY**

Study one of Earth's most notorious plant species. Medicinal yet addictive, the opium poppy has had a multitude of uses throughout civilization. Cultural historian and author of *Milk of Paradise*, Lucy Inglis takes you through the poppy's intricate history, from its ancient origins and characteristics to the current opioid crisis facing America.

Friday, 10/18, 11 am–2 pm  
Lucy Inglis | NYBG | 202BOT289

\$59/\$65

**NEW! NATURE'S RECORDING DEVICE: WHAT TREE RINGS REVEAL ABOUT CLIMATE CHANGE**

Join Neil Pederson, Ph.D., professor and senior ecologist at the Harvard Forest, for this interactive workshop on what tree rings can teach us about the ways ecosystems respond to climate change. Old trees hold precious information about climate, precipitation levels, and forest composition changes over time, which may help us better predict the pace and scale of change to come. You'll hike into NYBG's old-growth Thain Family Forest, where you'll learn to identify old trees and hear what they can teach us about our region's ever-changing biodiversity.

Friday, 2/21, 11 am–2 pm  
Neil Pederson | NYBG | 203BOT397

\$59/\$65 *Certificate Elective*

# Crafts & DIY

*Cooler air and longer nights offer fresh inspiration to get crafty with plants! We make it easy—all materials are included!*



## INDIGO DYE WORKSHOP

Create a vibrant pair of tea towels by dyeing them in alluring, ancient indigo! You'll experiment with several different ways to create patterns using traditional Japanese shibori techniques. Textile artist Molly George will also show you just how easy it is to create an organic indigo vat with only three natural ingredients so you can continue the fun at home!

Saturday, 9/21, 12–3 pm  
Molly George | NYBG | 201CRF164B

\$115/\$125

## HYPER-TUFA PLANTER

Making a hyper-tufa planter is like making mud pies: messy and fun! Use peat moss, perlite, cement, and water to create a lightweight container that mimics the look of an old stone English watering trough. Hyper-tufa planters are the perfect vessels for highlighting small plants, including herbs and cacti. Nick Gershberg shares his secrets about the best materials to use and the most innovative planting ideas. Bring home your own DIY planter.

Saturday, 10/5, 10 am–1 pm  
Nick Gershberg | NYBG | 202CRF148A

Saturday, 2/1, 12–3 pm  
Nick Gershberg | NYBG | 203CRF148B

\$95/\$105

## WATERCOLOR BASICS

You loved 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 cut flowers as your subject, you will 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!

Thursday, 10/10, 6:30–8:30 pm  
Jenny Kroik | Manhattan | 202CRF277A

Saturday, 3/14, 12–2 pm  
Jenny Kroik | NYBG | 203CRF277B

\$95/\$105

## PAPER ROSES WITH LIVIA CETTI

Livia Cetti—the celebrated artist who “makes paper bloom” (*The New Yorker*)—returns to the Garden to show you how to create a three-dimensional blossom from hand-dyed crepe paper and tissue paper to make beautiful creations. You will fashion a high-style rose, from stem to stamen by cutting and shaping your paper into petals that you will assemble using wire and floral tape. You'll take home an exquisite, lifelike flower that will brighten your home regardless of the season.

Thursday, 10/17, 10 am–1 pm  
Livia Cetti | NYBG | 202CRF119

\$149/\$165

**WINTER WONDERLAND WREATH**

Take inspiration from the wintry outdoors as you recreate a nature scene on a three-dimensional, lighted grapevine wreath using preserved cedar, juniper, mushroom birds, and other seasonal botanicals. Then top it off with a sprinkling of faux snow.

Saturday, 11/23, 11 am–2 pm  
Madeline Yanni | NYBG | 202CRF155

\$115/\$125

**CREATE A BOTANICAL BUILDING**

Create a building replica with natural materials in the style of the *Holiday Train Show*®! Explore architectural styles, and then choose from an assortment of dried botanicals such as pods, bark, and branches to make your own detailed 1-foot tall model. Includes a brief tour of the *Holiday Train Show* to inspire you! Please bring lunch and a box to carry home your creation.

Saturday, 12/7, 9:30 am–4 pm  
Madeline Yanni | NYBG | 202CRF142

\$175/\$195

**TABLETOP HOLIDAY TOPIARY**

Create a 2-foot tall, round topiary using fresh-cut greens, including boxwood, variegated fan arborvitae, cedar, and juniper with blue berries. Decorate with an assortment of hand-colored dried botanicals—hydrangea, herbs, pods, roses, nuts, and more—to suit your personal style. Your topiary will stay fresh throughout the holiday in a terra-cotta pot. Bring a box to transport your creation home.

Saturday, 12/14, 1:30–4 pm  
Diana Conklin | NYBG | 202CRF158

\$115/\$125

For more holiday-inspired classes, see page 22.

**NEW! PLANT MANDALAS**

Play with color and form as you shape plant materials to create your own mandala, a geometric symbol of wholeness. Guided by Bryan Whitney—a fine art photographer who specializes in alternative imaging techniques, including x-rays, and lens-less photography you will assemble petals, leaves, seed pods, grasses into a unique creative design. We will photograph the results and make a 1:1 print on fine-art paper for you to take home. Tweezers and plant material will be provided.

Sunday, 10/20, 11 am–2 pm  
Bryan Whitney | NYBG | 202CRF126

\$115/\$125

**BOTANICAL JEWELRY: BOTANICALS IN RESIN**

Make a pendant necklace, bracelet or post earrings using dried botanicals and other natural elements. Eco-jeweler and Brooklyn Botanic Garden Curator, Margarita Poulson, shows you how to use casting epoxy, to dry and press plant materials, to embed pieces in resin, and to finish your creations. Materials are provided, but students are welcome to bring their own dried botanicals, small photos, and bits of paper or fabric. Due to the nature of the resin, individuals with asthma or who may be pregnant should not take this class.

2 Saturdays, 11/9 & 11/16, 11 am–2 pm  
Margarita Poulson | Manhattan | 202CRF122

\$159/\$175

**LIVING DÉCOR: SUCCULENTS, STONES, AND MOSS GEODESIC DOME TERRARIUM**

Use a selection of plump succulents, thick moss, and stones, housed in a geometric glass vessel, to make a delightful oasis garden, under the guidance of our instructor who literally wrote the book *Terrariums: Gardens Under Glass*.

Tuesday, 11/19, 6:30–8:30 pm  
Maria Colletti | Manhattan | 202CRF162A

Thursday, 1/16, 6:30–8:30 pm  
Maria Colletti | Manhattan | 203CRF162B

\$115/\$125

**FRIENDS' NIGHT OUT: FLORAL ARRANGEMENTS**

Gather your friends, coworkers, and/or family for a night of fun at our Midtown Center. Get creative as you put together your own professional-looking floral arrangement while enjoying hors d'oeuvres, music, and conversation. Unwind while learning something new!

Thursday, 12/12, 6:30–8 pm  
Joshua Werber | Manhattan | 202CRF115A

Tuesday, 2/11, 6:30–8 pm  
Nsombi Woodson | Manhattan | 203CRF115B

\$129/\$145

**NEW! POKEBERRY PAINTED TOTE BAGS**

Let's get messy! Visual artist Jessica Maffia will show you how to turn pokeweed berries into a purple-toned ink that you'll use to decorate a cotton tote bag. Choose to paint free hand, use foraged botanical materials as stamps, or use our stencils. Homemade turmeric dye will also be provided.

Saturday, 1/25, 11 am–2 pm  
Jessica Maffia | Manhattan | 203CRF207B

\$115/\$125

**LEATHERWORK 101: BOTANICAL JOURNALS**

Learn basic leatherworking skills as you create a keepsake journal covered with beautiful, botanical designs. We'll show you how to trace and cut a pattern, punch holes for hand stitching, and apply finishing hardware. You can use the finished product for anything, even a field notebook or a sketchbook! We provide all materials, including a Moleskine journal.

Saturday, 2/22, 11 am–3 pm  
Jennifer Laursen | Manhattan | 203CRF124

\$125/\$139

**NEW! HAND-DYED LEATHER CLUTCH**

Craft a beautiful clutch or wallet from vegetable-dyed tanned leather. Embrace basic leatherworking as you cut, dye, and assemble the leather pieces by hand stitching. You will apply a button snap and burnish the wallet edges to finish the project. Walk away with a new accessory, as well as the confidence and knowledge of the tools and techniques to make more leather goods at home.

Sunday, 2/23, 11 am–3 pm  
Jennifer Laursen | NYBG | 203CRF195

\$125/\$139

**NEW! WOVEN WILLOW OBELISK**

A staple of English gardens, a willow obelisk serves as a graceful plant support or a decorative focal point in your garden. Jessica Clark, owner of the Hudson Valley's Willow Vale Farm, will teach you traditional willow weaving techniques, including randing and pairing. You'll have time to experiment before you create an eco-friendly obelisk, which will include an Irish mouth wale base and a Japanese eye knot top. Strong hands are a must!

Saturday, 2/29, 10 am–4 pm  
Jessica Clark | NYBG | 203CRF166

\$215/\$239



# Floral Design



©James Gurney, *Common Lilac*, Gouache

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. With hands-on practice and with personal attention from NYBG's rigorous yet nurturing instructors, you'll develop the mastery and confidence to express yourself through flowers. So come take a class with us at the Garden or our Midtown Education Center! Choose an individual course for fun, or pursue a Certificate in Floral Design.

## THE CERTIFICATE PROGRAM

The NYBG Certificate Program helps you develop your own aesthetic and master the mechanics for everything from simple bouquets to grand-scale arrangements, while giving you a practical, real-world, business foundation.

During the course of the program, students will:

- Create more than 40 original floral designs for all occasions, including weddings, parties, and holidays.
- Gain a solid grounding in color theory and an understanding of historical and contemporary floral styles.
- Develop skills needed to build or sustain a thriving floral business: retail ordering, cost analysis, scheduling, project management, marketing, client relationships, and managing personnel.

## STUDENT INFORMATION

### FOR ALL STUDENTS

- Register early! Instructors order flowers in advance, so you must register at least five business days before the start of class.



- Students are required to bring their own florist knife and clippers to class. To purchase a tool kit, including knife, wire cutter, scissors, and pruners, email [adulted@nybg.org](mailto:adulted@nybg.org) or call 718.817.8747.
- Please bring lunch to classes meeting all day.
- Please bring a box or bag in which to take arrangements home.

### FOR CERTIFICATE STUDENTS

#### Certificate Requirements

Certificate students must complete 142 total course hours (118 required + 24 elective), plus an 80-hour internship. Students are also required to submit a portfolio showcasing photos of class assignments and their own unique creations.

#### Certification Deadline

Students who expect to graduate in June 2020 must inform the Registration Office in writing of their candidacy by February 21, 2020. Students will be contacted by April 15 to confirm that all their course requirements have been met. If you are not contacted, please call the Registration Office at 718.817.8747. Portfolios must be submitted to the Registration Office no later than May 6, 2020.



The Program Coordinator, Tom Cawley, is a certified Master Designer with four decades of diverse experience in retail and high-end event production. He has created lush, large-scale projects for royalty, political figures, and society clients in France, Monte Carlo, Saudi Arabia, the U.K., and the U.S.; and for the past ten years, he has been an inspirational instructor here at NYBG.

**QUESTIONS? CONTACT PROGRAM COORDINATOR TOM CAWLEY AT [FDNCOORDINATOR@NYBG.ORG](mailto:FDNCOORDINATOR@NYBG.ORG)**



**GET NYBG CERTIFIED**

Founded in 1977, 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. Along with comprehensive hands-on instruction from industry pros, you'll develop the contacts and business savvy you need to advance your career or manage your own business.

## CERTIFICATE REQUIREMENTS

Course	Code	Hours	Page
Fundamentals of Form	FDN 300	16	22
Fundamentals of Style	FDN 302 <b>P</b>	16	22
Wedding Design I: Personals	FDN 304 <b>P</b>	16	22
Color Theory for Floral Design	FDN 306	8	22
Flower ID from A to Z	FDN 308	8	23
Interior Plantscapes	FDN 310	8	22
Shopping the New York Flower Market	FDN 400 <b>P</b>	4	22
Modern Sympathy Designs	FDN 382 <b>P</b>	6	23
Wedding Design II: Ceremony & Reception	FDN 305 <b>P</b>	16	22
Grand-Scale Arrangements	FDN 502 <b>P</b>	8	23
Event Planning for the Floral Designer	FDN 504 <b>P</b>	12	23
Elective courses		24	
<b>TOTAL REQUIRED HOURS</b>		<b>142</b>	

## ELECTIVES

Course	Code	Hours	Page
Woodland Wildscaping	FDN 394	3	20
Gothic Style: Dark and Dramatic	FDN 307	3	21
Sculptural Headpieces	FDN 316	3	21
Prop Styling with Botanicals	FDN 312	3	21
Cascading Bouquet	FDN 371	3	21
The Art of Sustainability with Ingrid Carozzi	FDN 418	3	21
Magnolia Leaf Wreath	FDN 355	4	22
Holiday Winter White Tablescape	FDN 320	3	22
Holiday Greens Workshop	FDN 335	5	22
Compote Arrangement	FDN 349	6	21
Designing with Holly Chapple	FDN 429	3	23
The Language of Design with Christin Geall	FDN 448	3	23
The Power of Color with Christin Geall	FDN 435	3	23

**P** Courses with a prerequisite before you can register

The Floral Design Certificate Program is an accredited Education Partner of the American Institute of Floral Designers (AIFD). See p. 59 for details.



## Fast-Track Your Training

**Our mini-intensives provide an accelerated way to complete the first few requirements in the NYBG Certificate Program. You'll work with industry professionals to gain the key skills needed to become a floral designer.**

### FUNDAMENTALS OF FORM | FUNDAMENTALS OF STYLE WEDDING DESIGN I

Tuesday–Thursday, 10/29–11/14, 11 am–4:30 pm | NYBG  
202FDN957 | \$1,710/\$1,885

### FUNDAMENTALS OF FORM | FUNDAMENTALS OF STYLE

Monday–Thursday, 1/27 – 2/6, 10:30 am–3 pm | Manhattan  
203FDN956 | \$1,149/\$1,265



Prop Styling with Botanicals, Robin Zachary

## FLOWER ARRANGING WITH STORE-BOUGHT BOUQUETS

Create your own professional-looking arrangements with economical, store-bought bouquets. Using simple design principles and fresh flowers from European-style displays in your grocery store, learn how to design and create your own elegant arrangements. \$45 materials fee.

Monday, 9/16, 6–8 pm | Rose G. Edinger | Manhattan | 201FDN210D

Tuesday, 10/15, 11 am–1 pm | Bessie Mendler | NYBG | 202FDN210A

Thursday, 10/24, 11 am–1 pm | Joshua Werber | Manhattan | 202FDN210B

Tuesday, 11/12, 6–8 pm | Nsombi Woodson | Manhattan | 202FDN210C

Monday, 11/4, 11 am–1 pm | Rose G. Edinger | NYBG | 202FDN210D

Tuesday, 12/10, 11 am–1 pm | Rose G. Edinger | Manhattan | 202FDN210E

Tuesday, 2/18, 11 am–1 pm | Rose G. Edinger | NYBG | 203FDN210F

Monday 2/24, 11 am–1 pm | Rose G. Edinger | Manhattan | 203FDN210G

Thursday, 3/19, 6–8 pm | Rose G. Edinger | Manhattan | 203FDN210H

\$49/\$55

## SIMPLE AND SLEEK FLORAL DESIGN IDEAS

Fifteen minutes is all it takes for a stylish arrangement that will transform your table! Working with a variety of seasonal flowers, you'll learn how to execute simple yet impactful designs that are versatile, sophisticated, and eco-friendly. Take home one finished arrangement—and plenty of easy design ideas. \$45 materials fee.

Monday, 10/7, 11 am–1 pm | Bessie Mendler | Manhattan | 202FDN203A

Thursday, 11/7, 11 am–1 pm | Trish O'Sullivan | New Canaan Nature Center, New Canaan, Conn. | 202FDN203B

Wednesday, 12/4, 6–8 pm | Rose G. Edinger | Manhattan | 202FDN203C

Tuesday, 1/21, 6–8 pm | Rose G. Edinger | Manhattan | 203FDN203D

Monday, 3/16, 11 am–1 pm | Bessie Mendler | NYBG | 203FDN203E

Thursday, 3/26, 6–8 pm | Rose G. Edinger | Manhattan | 203FDN203F

\$49/\$55

## NEW! WOODLAND WILDSKAPING

"Wildscaping" is a movement in sustainable floral styling that evokes meadows and woods. Using distinctive, natural wood branches as a container, you'll construct a Woodland Wildscape centerpiece from wildflowers, vines, berries, mosses and ferns. The effect is magical, sophisticated, and achieved by binding your materials... without using floral foam. \$125 materials fee.

Tuesday, 10/1, 10 am–1 pm | Trish O'Sullivan | New Canaan Nature Center, New Canaan, Conn. | 202FDN394A

Thursday, 10/17, 10 am–1 pm | Trish O'Sullivan | NYBG | 202FDN394B

\$115/\$125 *Certificate Elective*

**NEW! GOTHIC STYLE: DARK AND DRAMATIC**

Channel windswept moors, foreboding castles, and covens as you design a haunting floral design in utilizing dramatic and beautiful seasonal materials. You'll combine black dahlias, chocolate cosmos, and other inky-toned blooms with twisted branches and seed pods to create witchy, wild arrangements for entranceways, dining tables, or mantels. \$100 materials fee.

Thursday, 10/10, 6–9 pm | Joshua Werber | Manhattan | 202FDN307

\$95/\$105 *Certificate Elective*

**NEW! PROP STYLING WITH BOTANICALS**

Professional prop stylist Robin Zachary shares her insights on styling photos using botanicals. She'll also show you how to curate a variety of tabletop settings, including modern, vintage, and rustic. Backdrops and props will be provided. Bring your camera or smartphone so you can experiment. No professional experience necessary.

Saturday, 10/19, 11 am–2 pm | Robin Zachary | Manhattan | 202FDN312

\$95/\$105 *Certificate Elective*

**CASCADING BOUQUET**

A fully wired bridal bouquet is the pinnacle of sophistication and luxury. Instagram phenom and armature expert Joshua Werber, known for his playful headpieces, will show you a variety of techniques to wire the most beautiful seasonal blooms into a romantic, cascading bouquet. \$85 materials fee.

Monday, 10/21, 6–9 pm | Joshua Werber | Manhattan | 202FDN371A

Thursday, 1/23, 11–2 pm | Joshua Werber | NYBG | 203FDN371B

\$115/\$125 *Certificate Elective*

**SCULPTURAL HEADPIECES**

Joshua Werber's playful headpieces are certain to delight, as his many followers on Instagram readily attest. In this special workshop, Joshua will discuss how to use botanical materials to design headpieces that evoke a wide variety of emotions. Learn the basic mechanics needed to create unique forms, while experimenting with making a bold statement of your own. You'll have a wide variety of plant material to choose from as you create, all while drawing inspiration from Josh's lush aesthetic and sculptural approach to flowers. \$85 materials fee.

Wednesday, 10/30, 6–9 pm | Joshua Werber | Manhattan | 202FDN316

\$135/\$149 *Certificate Elective*

**COMPOTE ARRANGEMENT**

Learn the techniques and secrets for creating chic, vintage-inspired arrangements in a trendy footed container. Walk through the step-by-step process of crafting a lush, romantic centerpiece. \$85 materials fee.

Tuesday, 1/28, 10:30 am–3 pm | Nsombi Woodson | NYBG | 203FDN349A

Monday, 2/10, 10:30 am–3 pm | Nsombi Woodson | Manhattan | 203FDN349B

\$125/\$139 *Certificate Elective*

**INDOOR LIGHTING BASICS**

Dive in to using low-budget table-top lighting equipment and techniques to make compelling photos of botanical subjects and floral arrangements. Photographer David Samuel Stern will discuss the basic principles of still-life lighting design and walk you through manual camera controls to achieve optimal effect, and get the foundation on which to craft photos as striking as the old Dutch Masters paintings! Please bring a camera with manual controls and a tripod.

Saturday, 2/22, 1–5:30 pm | David Samuel Stern | NYBG | 203GWP228

\$85/\$95

## *The Cutting Edge A Floral Design Series*

Work closely with a trending floral designer whose unique ideas and approaches are bringing new energy to contemporary design.

### *The Art of Sustainability with Ingrid Carozzi*



Ingrid Carozzi is one of New York's most sought-after florists, and as owner of Tin Can Studios in Brooklyn, she's at the forefront of the sustainable floristry movement.



Ingrid is known for her unruly yet sophisticated designs in vintage or reclaimed vessels, and breathtaking, large-scale installations: hanging chandeliers, living walls, and urn arrangements. Deeply committed to sustainable practices, she works with a variety of alternatives to floral foam, a plastic product that takes decades to break down.

In this hands-on workshop, Ingrid will guide students through the creation of a flower wall in her lush and organic modern

aesthetic that. You'll use unexpected contrasts and a variety of sustainable alternatives (including non-toxic paint!).

**Ingrid Carozzi** creates arrangements for romantic weddings and a long list of corporate and A-list clients, including Anna Wintour, John Legend, and Rachel Ray. Named #1 Florist by *New York Magazine*, Carozzi has been featured in *Vogue*, *Martha Stewart*, *InStyle*, *Town & Country*, *The Knot*, *Brides*, and others. She is the author of *Brooklyn Flowers* and *Handpicked*.

Tuesday, 10/22, 11 am–4 pm | Ingrid Carozzi | NYBG | 202FDN418  
\$395/\$435 *Certificate Elective* (Limited to 12 students.)



## Holiday Workshops

### HOLIDAY WINTER WHITE TABLESCAPE

A grand centerpiece in a pedestal vase brings the elegance of a Dutch still-life to your dining or entry room. Capture the essence of this festive season with large Dutch amaryllis and ranunculus, English garden roses, Italian lisianthus, hydrangeas, and snow and hypericum berries set against deep-green pine, blue-green eucalyptus, and the soft velvet grays of dusty miller. You'll learn conditioning techniques to keep your display vibrant and long-lasting without harmful chemicals or floral foam, and bring home an arrangement that adds the "wow" factor to your holiday celebrations. \$125 materials fee.

Tuesday, 12/3, 10 am–1 pm  
Trish O'Sullivan | New Canaan Nature Center, New Canaan, Conn. | 202FDN320A

Friday, 12/13, 10 am–1 pm  
Trish O'Sullivan | NYBG | 202FDN320B

\$115/\$125 *Certificate Elective*

### MAGNOLIA LEAF WREATH

Southern charm and hospitality come front and center with a glossy, richly decorated wreath of magnolia leaves on a door, mantel, or accent wall. Weave leaves into a wreath form, then complement shape and color with seasonal fruit, pine cones, holly, and other native greenery. \$65 materials fee.

Wednesday, 12/4, 10 am–2:30 pm  
Thomas Cawley | NYBG | 202FDN355

\$125/\$139 *Certificate Elective*

### HOLIDAY GREENS WORKSHOP

The holidays come to life with fragrant, long lasting decorations for your door, table and mantel. Explore working with fresh pine, fir, cedar, boxwood, juniper and arborvitae. Cones and berries will add seasonal interest. Personalize your projects with accents of ribbons and millimeter balls. \$80 materials fee.

Friday, 12/6, 10 am–3:30 pm  
Ken Norman, AIFD | NYBG | 202FDN335A

Saturday, 12/7, 10:30 am–4 pm  
Ken Norman, AIFD | Manhattan | 202FDN335B

\$135/\$149 *Certificate Elective*

### CERTIFICATE REQUIREMENTS

**These classes are also open to Non-Certificate Students**

#### FUNDAMENTALS OF FORM

Learn the keys to successful floral design and master the mechanics needed to create round, triangular, parallel, and crescent arrangements. Experiment with shape, line, and symmetry while composing beautiful, balanced creations. \$245 materials fee.

4 Sundays, 9/15–10/20 (no class 9/29 & 10/13),  
11 am–3:30 pm

Nsombi Woodson | NYBG | 201FDN300E

4 Wednesdays, 9/11–10/2, 10:30 am–3 pm  
Thomas Cawley | NYBG | 201FDN300F

6 Tuesdays, 9/24–11/5 (no class 10/8), 6:15–8:55 pm  
Jameel Gilbert | Manhattan | 201FDN300G

Tuesday–Thursday, 10/29–10/31, 11 am–4:30 pm  
Nsombi Woodson | NYBG | 202FDN300A

4 Wednesdays, 1/8–1/29, 10 am–2:30 pm  
Thomas Cawley | NYBG | 203FDN300B

Monday–Thursday, 1/27–1/30, 10:30 am–3 pm  
Jameel Gilbert | Manhattan | 203FDN300C

\$395/\$435 *Certificate Requirement*

#### 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. \$245 materials fee.

**Prerequisite:** *Fundamentals of Form*

4 Sundays, 10/27–11/17, 11 am–3:30 pm  
Nsombi Woodson | NYBG | 202FDN302A

Tuesday–Thursday, 11/5–11/7, 11 am–4:30 pm  
Nsombi Woodson | NYBG | 202FDN302B

6 Mondays, 10/28–12/16 (no class 11/11 & 11/25),  
6:15–8:55 pm

Jameel Gilbert | Manhattan | 202FDN302C

4 Wednesdays, 2/12–3/4, 10 am–2:30 pm  
Thomas Cawley | NYBG | 203FDN302D

Monday–Thursday, 2/3–2/6, 10:30 am–3 pm  
Jameel Gilbert | Manhattan | 203FDN302E

\$395/\$435 *Certificate Requirement*

#### SHOPPING THE NEW YORK FLOWER MARKET

Learn to navigate the bustling New York flower district! Discover where to get the best flowers and hard goods from the pros. Your confirmation letter will include where we will meet in the flower district. Lunch is not included. Dress for the weather.

**Prerequisite:** *Fundamentals of Form*

Tuesday, 9/24, 9 am–12:30 pm  
Nsombi Woodson | Off site | 201FDN400D

Thursday, 11/21, 9 am–12:30 pm  
Rose G. Edinger | Off site | 202FDN400A

\$95/\$105 *Certificate Requirement*

### WEDDING DESIGN I: PERSONALS

Flowers play a crucial role in creating a memorable wedding. Learn the elements of successful floral wedding design, including the art of fine wiring and taping to create corsages and boutonnieres with fresh flowers, ribbons, and bows. Advance to the techniques of styling and assembling bridal and bridesmaid bouquets. \$225 materials fee.

**Prerequisite:** *Fundamentals of Style*

4 Mondays, 9/23–10/28 (no class 9/30 & 10/14),  
11 am–3:30 pm

Nsombi Woodson | NYBG | 201FDN304C

Tuesday–Thursday, 11/12–11/14, 11 am–4:30 pm  
Thomas Cawley | NYBG | 202FDN304A

4 Mondays, 1/27–2/24 (no class 2/17), 10 am–2:30 pm  
Thomas Cawley | NYBG | 203FDN304B

6 Tuesdays, 2/18–3/31 (no class 3/17), 6:15–8:55 pm  
Bessie Mendler | Manhattan | 203FDN304C

\$395/\$435 *Certificate Requirement*

### 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. \$245 materials fee.

**Prerequisite:** *Wedding Design I*

4 Wednesdays, 4/22–5/13, 10 am–2:30 pm  
Thomas Cawley | NYBG | 204FDN305

\$395/\$435 *Certificate Requirement*

### COLOR THEORY FOR FLORAL DESIGN

Colors—like flowers themselves—evoke feeling and sentiment, and set the mood. Explore the role of color in floral design using a spectrum of flowers. This course gives you a solid grounding in color theory, while highlighting the latest hues and color combinations. \$100 materials fee.

2 Thursdays, 9/26 & 10/3, 10 am–2:30 pm  
Jameel Gilbert | NYBG | 201FDN306C

3 Wednesdays, 11/6–11/20, 6:15–8:55 pm  
Rose G. Edinger | Manhattan | 202FDN306A

2 Saturdays, 2/1 & 2/8, 11 am–3:30 pm  
Julio Jimenez | NYBG | 203FDN306B

3 Mondays, 3/23–4/6, 6:15–8:55 pm  
Jameel Gilbert | Manhattan | 203FDN306C

\$195/\$215 *Certificate Requirement*

### INTERIOR PLANTSCAPES

Florists and floral designers who want long-lasting, gorgeous interior plantings won't want to miss this unique class from florist, horticulturist, and indoor plant expert Chris Raimondi. In this class, Chris shares essential horticulture practices for proper selection and maintenance of plants used in atria, corporate offices, and for special events. Trimming, pruning, soil testing, pest prevention, cleaning, and more are covered. \$30 materials fee.

2 Wednesdays, 10/16 & 10/23, 10 am–2:30 pm  
Chris Raimondi, CLP | NYBG | 202FDN310

\$195/\$215 *Certificate Requirement*

**FLOWER ID FROM A TO Z**

There are many types of flowers available for floral designers, from exotic imports to locally grown. Learn to identify new varieties of old favorites, seasonal flowers, and various foliage. Topics include the special handling needs of many flower types. Take home an assortment of flowers from each class. \$75 materials fee.

2 Sundays, 12/1 & 12/8, 10:30 am–3 pm  
Jameel Gilbert | NYBG | 202FDN308A

3 Thursdays, 2/20–3/5, 6:15–8:55 pm  
Rose G. Edinger | Manhattan | 203FDN308B

\$195/\$215 *Certificate Requirement*

**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. Learn how to stage decor for large-scale event arrangements, design cocktail receptions, and develop formal and informal tablescapes. \$185 materials fee.

**P** Prerequisite: *Wedding Design I*

Tuesday–Thursday, 9/17–9/19, 10:30 am–3 pm  
Trish O’Sullivan | Manhattan | 201FDN504A

3 Tuesdays, 3/17–3/31, 10 am–2:30 pm  
Thomas Cawley | NYBG | 203FDN504B

\$285/\$315 *Certificate Requirement*

**MODERN SYMPATHY DESIGNS**

Sympathy arrangements, properly composed, pay tribute to a departed loved one and offer solace to the grieving. There are details to be discussed with a bereaved family, special etiquette to be observed, and a wide choice of designs that make a touching statement of final tribute. Construction and mechanic of funeral baskets, casket sprays, and set pieces associated with a diversity of cultural traditions are emphasized. \$170 materials fee. **P** Prerequisite: *Fundamentals of Form*

Wednesday, 3/4, 10 am–4:30 pm  
Bessie Mendler | NYBG | 203FDN382

\$179/\$195 *Certificate Requirement*

**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. \$200 materials fee. **P** Prerequisite: *Wedding Design II*

2 Tuesdays, 4/7 & 4/14, 10 am–2:30 pm  
Thomas Cawley | NYBG | 204FDN502

\$225/\$249 *Certificate Requirement*

# Master Classes

## Designing with Holly Chapple

Here’s your chance to learn from the best in a full-day hands-on workshop with groundbreaking floral designer, teacher, and entrepreneur Holly Chapple. She’ll share insights into her celebrated design approach, which is defined by elegance, beauty, creativity, and her game-changing Egg and Pillow mechanics—recyclable and reusable foam-free solutions for stunning bouquets and centerpieces.

In the morning session, you’ll fashion a gorgeous airy handheld bouquet while using fewer stems than ever before. The afternoon will focus on creating a low, cascading centerpiece in Holly’s signature Abby compote. Along the way, you’ll get master advice on flower selection, wiring, and placement, and priceless real-world business tips. Holly’s designs are approachable for all levels of experience.



“Flower Mama” **Holly Heider Chapple**, is a visionary trend-setter, mentor, influencer, business leader, and advocate for sustainable floristry and farming. Known for the lush, textured floral designs she creates for weddings and events, she also operates Hope Flower Farm, while inspiring and involving designers around the world via her distinguished Chapple Designers clan. Chapple’s work has been extensively featured in *Martha Stewart Weddings*, *Brides Magazine*, *The Knot*, and many other prominent publications and blogs.

Friday, 11/22, 10 am–4 pm | NYBG | 202FDN429  
\$355/\$389 *Certificate Elective*

The Abby compote, Egg and Pillow courtesy of Syndicate Sales. David Austin Roses courtesy of Alexandra Farms



## Christin Geall

*“Creatives, in my opinion, are largely made, not born... if you cultivate creativity it does grow. You just have to give it your attention.”*

Followed by legions on Instagram, Canadian designer Christin Geall is known for her jewel-toned, asymmetrical compote arrangements crafted with flowers from her own urban flower farm-studio *Cultivated by Christin*. Formally trained at the Royal Botanic Gardens, Kew, she is a regular columnist for *Gardenista* and author of *Cultivated: Elements of Floral Style* due out in 2020.

**THE LANGUAGE OF DESIGN**

Drawing examples from 18th-century art and architecture—Christin demystifies the language of design to show how color, texture, shape, and space combine to create particular “styles.” Take inspiration from Christin’s “modern-meets-old-world” aesthetic as you fashion arrangements with seasonal flowers in two distinct styles under her expert guidance.

Thursday, 3/12, 10:30 am–4 pm | NYBG | 203FDN448  
\$355/\$389 *Certificate Elective*

**THE POWER OF COLOR**

Using spring bulbs and branches, explore how the textural and structural qualities of your botanical elements can guide the tones you choose. Christin will walk you through your own arrangements, using analogous colors and monochromatic schemes to accent the architectural beauty of your flowers.

Friday, 3/13, 10:30 am–4 pm | NYBG | 203FDN435  
\$355/\$389 *Certificate Elective*



Register for both and receive a discount: 203FDN450 | \$639/\$695

# Food & Drink

*Experiment with fermentation, food preservation, and beekeeping! Or explore the botany and horticulture behind the foods and beverages you consume.*



©Hui Lai Chong, *Fountain of Life*, Oil

## THE 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 make a chili tomato salsa, marinara sauce, and crushed tomatoes for the pantry, all of which can be safely preserved for future use. When you're dining on fresh tomatoes come December, you'll be thankful you came!

Thursday, 9/12, 11 am–3 pm  
Stephen Nocera | NYBG | 201CKG226

\$79/\$85

## GROW GOURMET MUSHROOMS INDOORS

Mushrooms have been utilized for thousands of years for medicinal and edible purposes. John Michelotti, owner of Catskill Fungi, will show you how to cultivate gourmet mushrooms at home using safe and simple techniques. Using cardboard and coffee grounds, create your own oyster mushroom starter (*Pleurotus ostreatus*) to take home, while learning about the life cycles, characteristics, and medicinal and culinary properties of fungi.

Saturday, 9/14, 10 am–1 pm  
John Michelotti | NYBG | 201CKG207B

Thursday, 1/9, 6:15–9:15 pm  
John Michelotti | Manhattan | 203CKG207A

Saturday, 2/8, 10 am–1 pm  
John Michelotti | NYBG | 203CKG207B

\$75/\$85

## NEW! NATIVE EDIBLE PLANTS

Meet the edible indigenous plants of the Northeast that chef Marie Viljoen uses every day in her Brooklyn kitchen to develop a delicious regional American cuisine. We'll discuss preparations and recipes using native American plants that have the potential to define a way of eating that speaks to place, such as Aronia, bayberry, black cherry, cattails, common milkweed, persimmon, pitch pine, prickly ash, serviceberry, spicebush, sumac, and sweetfern. A wild-inspired snack will be served.

Saturday, 10/5, 2–5 pm  
Marie Viljoen | NYBG | 202CKG213

\$79/\$85

## NEW! APPLES THREE WAYS

Make the most of the fall bounty! Trained in preservation techniques at Cornell University, Stephen Nocera will guide you in preparing three delicious apple treats to take home, including spiced apple sauce, an apple jelly with cranberries, and apple compote with maple syrup and walnuts. You'll walk away with techniques and recipes to keep preserving at home.

Saturday, 10/19, 11 am–3 pm  
Stephen Nocera | NYBG | 202CKG242

\$79/\$85

**HEALING SPIRITS: THE BOTANY OF APERITIFS AND DIGESTIFS**

The centuries-old botanical history of aperitifs and digestifs, from Chartreuse to Fernet Branca, stems in part from a monastic quest to divine an “elixir of long life.” Many cultures still commonly consume these herbal drinks, made of complex mixtures of plant material, for their unique flavor profiles and for their medicinal properties. As you taste selected aperitifs and digestifs, discover their botany and discuss the physiological impacts each have on human health. 21+

Wednesday, 10/16, 6:30–8:30 pm  
Brian Hockaday | Manhattan | 202CKG203A

Sunday, 12/1, 2–4 pm  
Tremeur Arbor | NYBG | 202CKG203B

Wednesday, 2/12, 6:30–8:30 pm  
Brian Hockaday | Manhattan | 203CKG203C

\$85/\$95

**INTRODUCTION TO WINE TASTING**

Taste and enjoy wine in a relaxed garden environment. After sampling and discussing an assortment of white and red wines, you’ll have a better grasp of what it means for a wine to be called dry, tannic, fruit forward, or acidic. We will also cover how different grape species, wine-making techniques, and the land itself influence how a specific wine tastes. No wine experience necessary! 21+

Sunday, 11/3, 2–4 pm  
Robert Brinkman | NYBG | 202CKG235A

Sunday, 2/9, 2–4 pm  
Robert Brinkman | NYBG | 203CKG235B

\$45/\$49



**Northeast Cuisine: Fiddlehead Summer Rolls**

**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.

Sunday, 12/8, 10 am–1 pm  
Frank Mortimer & Bob Slanzi | NYBG | 202CKG206A

Saturday, 2/22, 11 am–2 pm  
Frank Mortimer & Bob Slanzi | NYBG | 203CKG206B

\$59/\$65

*NEW! Visiting Chef***AARON BERTELSEN—GREAT DIXTER GARDENER COOK**

Discover how easily you can grow and cook the food you want to eat at this exclusive Edible Academy experience with Aaron Bertelsen, gardener cook at England’s Great Dixter. Bertelsen will share practical planting advice and cooking tips while he demonstrates the best ways to prepare recipes from his new cookbook, *Grow Fruits & Vegetables in Pots*. You’ll continue the conversation as he joins you for a light meal featuring the dishes he demonstrated.

In addition to managing its expansive vegetable garden, Bertelsen has transformed the kitchen courtyard of Great Dixter, the family home of legendary gardener and writer Christopher Lloyd, into a productive garden bursting with edibles. A creative gardener cook with a Diploma in Horticulture at the Royal Botanic Gardens, Kew, he is a sought-after speaker and the author of *The Great Dixter Cookbook*.

Friday, 2/14, 11 am–12:30 pm | Aaron Bertelsen | NYBG | 203CKG251 | \$145/\$159\*

\*Includes a signed copy of his new cookbook, *Grow Fruits & Vegetables in Pots*

**THE BASICS OF BLENDING TEA**

There’s more to blending tea than simply tossing herbs together. Nancy MacNamara—whose teas are a perennial favorite at NYBG’s Farmers Market—will discuss the flavor profiles of various dried leaves, roots, barks, fruit, flowers, and berries, as well as how to combine these ingredients with a base of black, green, or herbal tea. You’ll sample different brews before creating your own special blend to take home.

Saturday, 12/7, 11 am–2 pm  
Nancy MacNamara | NYBG | 202CKG219

\$79/\$85

**NEW! PRESERVING CITRUS: MARMALADES & CURDS**

Early winter is when citrus is at its juiciest. Learn how to preserve these fruits and savor their tangy flavor throughout the year. Cornell-trained master food preserver Stephen Nocera will demonstrate the proper balance of sweet and tart while you make a Meyer lemon curd, a pectin-free tangerine marmalade, and Moroccan-style preserved lemons.

Saturday, 1/25, 11 am–3 pm  
Stephen Nocera | NYBG | 203CKG249

\$79/\$85



**Preserving Citrus: Lemon Curd**

**MAKING MISO**

High in protein and rich in vitamins and minerals, miso has played an important nutritional role in Japan for centuries. In the traditional recipe, soybeans are fermented with salt and the fungus *Koji*, or *Aspergillus oryzae*. Explore the science behind making miso—both with soy and without, why it’s good for you, and how to prepare it yourself. You’ll walk away with recipes and techniques for making miso from soybeans, black beans, and nuts at home.

Thursday, 1/30, 6:30–8:30 pm  
Cheryl Paswater | Manhattan | 203CKG208

\$69/\$75

**MAKING KOMBUCHA**

Fermentation is one of our oldest food processing methods. Scientifically known as zymology, it refers to the conversion of carbohydrates into alcohols, carbon dioxide, yeast, or bacteria. We’ll cover the basic science of how to ferment tea to make kombucha, how it can improve your gut health, and ways to brew it yourself. You’ll try your hand at preparing a drink and some fruit leathers. All participants will take home recipes and a starter culture.

Thursday, 2/27, 6:30–8:30 pm  
Cheryl Paswater | Manhattan | 203CKG201B

\$69/\$75

**THE WONDERS OF AGAVE: TEQUILAS, RAICILLA, MEZCAL, AND SOTOLS**

Agave has been harvested from the arid “desert forests” of Mexico for over 9,000 years. Today, the genus is best known for the production of mezcal, which can be made from dozens of species, many still wild harvested today. Join NYBG ethnobotanist (and bartender!) Brian Hockaday to explore the history, biology, and taxonomy of this fascinating clade, while tasting your way through the family tree! 21+

Tuesday, 3/10, 6–8 pm  
Brian Hockaday | Manhattan | 203CKG210

\$79/\$85

# Gardening



©Lisa Mitchell, *Into the Rose Garden*, Oil

Today more and more people are realizing the physical, social, and psychological benefits of working with nature, and home and community gardening is a great way to make that connection. Whether you are new to gardening or already working in the field, NYBG's gardening classes are a great place to increase your knowledge and improve your skills. Taught by top professionals, each course provides cutting-edge information on ecologically responsible garden care and design, including plant use, soil husbandry, composting, and pest control. Lectures are supported by hands-on study on the Garden's historic grounds. Enroll in a class for fun or pursue a Certificate.

## THE CERTIFICATE PROGRAM

The NYBG Gardening Certificate Program covers sustainable gardening techniques, soil science, plant propagation, and garden care and design. Regional experts guide you through the art and science of plant selection and care for home or small-scale residential/urban/community gardens and greening projects. Certificate classes begin on page 31.

Upon completion of the 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	31
Introduction to Plant Science	HRT 300	16	37
Soil Science for Gardeners	GAR 302	12	31
Gardening with Native Plants	GAR 315	9	31
Insect Identification and Management	GAR 320	12	31
Disease Identification and Management	GAR 324	12	31
Fundamentals of Garden Design	GAR 342	P 12	31
Vegetable Gardening	GAR 431	P 12	31
Complete Garden Care and Maintenance	GAR 440	P 18	31
Pruning Principles and Practices	HRT 321	P 15	39
Plants for Landscaping	HRT 358	16	37
Plant Propagation I: Basic Principles	HRT 411	P 18	38
Elective GAR or HRT courses		23	
<b>TOTAL REQUIRED HOURS</b>		<b>187</b>	

## ELECTIVES

Course	Code	Hours	Page
Basic Color Theory for Gardeners	GAR 367	4	29
Houseplant Design Workshop	GAR 364	3	29
Garden Design Workshop	GAR 317	8	29
Container Gardening	GAR 327	8	28
A Four-Season Native Garden	GAR 369	4	28
Botanical Latin	GAR 360	10	31
Organic Gardening Basics	GAR 308	8	30
A Kitchen Garden Plan	GAR 325	3	30
Rooftop Gardening	GAR 328	6	30
Super Small Space Veggie Gardening	GAR 330	9	30

**P** Courses with a prerequisite before you can register  
For professional organizations, see p. 59.



The Program Coordinator, Daryl Beyers, brings over 20 years' experience designing residential gardens and private estates to NYBG. Daryl has gone from the self-described "the guy pushing the wheelbarrow" to the owner of his own design business and an accomplished garden writer. He's a former editor at *Fine Gardening*, and his articles have been featured in *HGTV Magazine* and in *Martha Stewart Living*, where he also served as Contributing Editor.

**QUESTIONS? CONTACT PROGRAM COORDINATOR DARYL BEYERS AT [GARCOORDINATOR@NYBG.ORG](mailto:GARCOORDINATOR@NYBG.ORG)**

## Meet the New Gardeners—An Evening with Daryl Beyers and Farmer Nick



Two very different gardeners who both believe gardening should be fun, come together for a lively hour of opinions and tips on growing indoor and outdoor ornamentals and edibles.



NYBG Program Coordinator Daryl Beyers will share insights from *The New Gardener's Handbook*, his new go-to resource guide for anyone just starting out. Nick Cutsumpas, Instagram

plant guru @farmernicknyc and self-styled "apartment farmer" will provide a dose of knowledge and confidence, including why it's okay if occasionally you kill your plants.

Thursday, 3/19, 6:30–7:30 pm  
Daryl Beyers | Manhattan | 203GAR940

\$10/\$20



©Frances Palmer

### MASTERING THE ART OF TOMATO GARDENING

Brooklyn's Eagle Street Farm founder Annie Novak shows you how to maintain a healthy, organic tomato garden in raised beds on your rooftop, in containers on your balcony, or in your backyard. Discover the best ways to create trellises, make a fertilizing regimen, manage pests and diseases, and select and store your most successful plants' seeds. Beginners and pros welcome!

Wednesday, 9/25, 6–9 pm  
Annie Novak | Manhattan | 201GAR143B

\$55/\$59

### ALL ABOUT BULBS

Since October is the optimum month to plant bulbs, now is the time to decide what will work best in your garden. Martha Stewart's Head Gardener Ryan McCallister is a bulb expert having grown hundreds of thousands on her farm. He'll discuss the biology, cultural needs, and particular habits of a wide variety of bulb types.

Saturday, 9/21, 10 am–1 pm  
Ryan McCallister | NYBG | 201GAR220

\$75/\$85

### A FOUR-SEASON NATIVE GARDEN

With a little bit of planning, your garden can look beautiful in all seasons, even after the flowers fade. Knowing which plants to select is key, since, according to rock star garden designer Piet Oudolf, it's about "texture and shape, the seed heads and the skeletons." Instructor Kim Eierman will introduce you to a variety of native plants that will extend the color show and textural interest in your garden through fall and winter, with beautiful foliage, striking structure, colorful branches, berries, and seed pods.

Saturday, 9/21, 10 am–2:30 pm  
Kim Eierman | NYBG | 201GAR369

\$85/\$95 *Certificate Elective*

### FALL DAHLIAS WORKSHOP

When celebrated ceramicist Frances Palmer isn't making gorgeous vessels, she's growing the sumptuous dahlias featured on her wildly popular Instagram feed. In this new workshop, she'll share secrets about how to divide, plant, fertilize, and stake your spring tubers, in addition to how to dig up and store them over the winter. You'll also learn how to select blooms and compose simple, yet stunning flower arrangements.

Saturday, 9/28, 10 am–1 pm  
Frances Palmer | NYBG | 201GAR279

\$75/\$85

### NEW! VERSATILE VIBURNUMS

Viburnums have recently skyrocketed to gardening fame, and for good reason! They offer so much to the landscape including unparalleled beauty and fragrance, adaptability and pest resistance, diverse landscape function, a food source for birds and pollinators, and so much more. Learn which of the many readily available native and exotic species and cultivars will thrive in your garden and discover how to best to care for them.

Saturday, 10/19, 10 am–1 pm  
Vincent Simeone | NYBG | 202GAR156

\$59/\$65

### CUT FLOWER FARMING

Join the cut flower farming revolution! Discover the basics of how to design, plant, grow, and harvest a cutting garden that will be productive throughout the seasons. You'll get hands-on practice starting seeds to ensure you always have something fresh to cut. We will also cover traditional and unexpected annual and perennial cut flower species and varieties that grow well locally.

2 Thursdays, 2/6 & 2/13, 6:15–8:15 pm  
Anne Marie Breyer | Manhattan | 203HRT142

\$135/\$149

### VERTICAL GARDENING: VINES & CLIMBERS

Vines and other climbing plants like clematis, wisteria, roses, hardy jasmine, and climbing hydrangea not only sport beautiful blossoms, they also provide strong vertical design—in backyards and patios, or rooftops and terraces. They can create outdoor enclosures and transform unattractive structures by clinging, twining, scrambling, or trailing. And in urban spaces, these vertical gardens give you more bloom for your buck! Learn how to choose the right climbing plant and how to train it to grow on a wall, up a trellis, or over an arbor or pergola.

Thursday, 3/26, 6–9 pm  
Doris Loechle | Manhattan | 203GAR146

\$55/\$59

### 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 want an overview of the practice or who are considering a Certificate.

3 Mondays, 9/16–10/7 (no class 9/30), 10 am–1 pm  
Daryl Beyers | NYBG | 201LAN100C

3 Tuesdays, 9/17–10/15 (no class 9/24 & 10/8),  
6:15–9:15 pm  
Kimberly Tryba | Manhattan | 201LAN100D

3 Mondays, 10/21–11/4, 10 am–1 pm  
Daryl Beyers | Manhattan | 202LAN100A

3 Saturdays, 11/2–11/23 (no class 11/16), 10 am–1 pm  
Kimberly Tryba | Manhattan | 202LAN100B

3 Saturdays, 2/22–3/7, 10 am–1 pm  
Kimberly Tryba | Manhattan | 203LAN100C

3 Thursdays, 3/5–3/19, 10 am–1 pm  
Sheri Forster | New Canaan Nature Center,  
New Canaan, Conn. | 203LAN100D

\$185/\$205

### CONTAINER GARDENING

Container gardening know-how is in high demand. Learn how to create a container garden for your patio, terrace, or entryway that is at once functional and gorgeous—and discover techniques for ensuring that your plants thrive in all four seasons.

2 Thursdays, 10/24 & 10/31, 10 am–2:30 pm  
Renee Marsh | NYBG | 202GAR327A

2 Sundays, 3/15 & 3/22, 10 am–2:30 pm  
Daryl Beyers | NYBG | 203GAR327B

\$229/\$249 *Certificate Elective*



**A GARDEN DESIGN PRIMER**

Take all your garden ideas and start putting them into place with this practical overview of garden design principles that ensure the best layout plan and circulation patterns. Learn how to analyze the space and create the perfect proportions that complement both home and garden, resulting in a coherent landscape design.

Saturday, 1/11, 10 am–12 pm  
Daryl Beyers | NYBG | 203GAR222A

Wednesday, 2/26, 6–8 pm  
Daryl Beyers | Manhattan | 203GAR222B

\$39/\$45

**GARDEN DESIGN WORKSHOP**

Good garden design isn't easy, but for anyone with a passion for plants, a little imagination, and proper guidance, it is possible to succeed. Learn the basics of garden design, review examples that work for different architectural styles and site conditions, and develop a go-to plant list for your home landscape. In the second session, you will develop and draw a basic design plan for your garden that you can take home to refine and implement come spring.

2 Sundays, 10/20 & 10/27, 10:30 am–3 pm  
Daryl Beyers | NYBG | 202GAR317A

2 Saturdays, 1/25 & 2/1, 10:30 am–3 pm  
Daryl Beyers | NYBG | 203GAR317B

\$225/\$249 *Certificate Elective*

**PERENNIAL PLANT COMBINATIONS**

Whether in a shady corner or a sunny border, selecting the right plant combinations makes the difference between a ho-hum garden and one that gets rave reviews. Concentrating on perennials, learn to use color, texture, height, and bloom when combining plants to create a harmonious look for your garden come spring. Please bring lunch.

Wednesday, 1/29, 10:30 am–3 pm  
Sheri Forster | New Canaan Nature Center, New Canaan, Conn. | 203GAR173A

Tuesday, 2/11, 10:30 am–3 pm  
Richard Rosiello | NYBG | 203GAR173B

Wednesday, 2/26, 10:30 am–3 pm  
Sheri Forster | Manhattan | 203GAR173C

Saturday, 3/21, 10:30 am–3 pm  
Michele Langone | NYBG | 203GAR173D

\$79/\$85

**BASIC COLOR THEORY FOR GARDENERS**

Learn how to effectively use color in plant combinations. Study the properties of value, hue, and intensity as they relate to choosing specific garden plants. Visual presentations and discussions are used to analyze various color schemes including analogous, sequential, complementary, and monochromatic. Please bring lunch.

Saturday, 2/22, 10 am–2:30 pm  
Laura McKillop | NYBG | 203GAR367

\$99/\$109 *Certificate Elective*

**INDOOR PLANTS**

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**HOUSEPLANT DESIGN WORKSHOP**

Do you prefer simple and clean or wild and lush? Whatever your preference, learn to use basic principles of repetition, symmetry, and color theory to blend your beloved 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. Walk away with a unique potted houseplant.

Wednesday, 10/2, 6–9 pm  
Daryl Beyers | Manhattan | 202GAR364

\$95/\$105 *Certificate Elective*

**BONSAI FOR BEGINNERS WORKSHOP**

Learn the fundamentals for turning ordinary nursery stock into a living work of art. This workshop covers the five major styles of bonsai along with plant and container selection, branch and root pruning, wiring, and potting. Students can choose to work with a tree that grows indoors or outdoors. Soil, container, wire, and tree will be provided. Please bring sturdy chopsticks, good pruning shears, and lunch to class.

Saturday, 10/5, 10 am–3:30 pm  
John Capobianco | Manhattan | 202GAR912A

Sunday, 10/6, 10 am–3:30 pm  
John Capobianco | NYBG | 202GAR912B

Saturday, 11/2, 10 am–3:30 pm  
John Capobianco | Manhattan | 202GAR912C

Saturday, 11/16, 10 am–3:30 pm  
John Capobianco | NYBG | 202GAR912D

\$195/\$215

**SUCCULENTS IN CONTAINERS**

Charming and relatively low maintenance, succulents make the perfect container planting. We'll go beyond the basics as we discuss how to choose and combine species to create healthy, beautiful plant communities. You'll also learn which soils and fertilizers to use, what to do with those pesky bugs, and how/when to repot your plants. Pot up the succulent of your choice to bring home.

Saturday, 10/5, 12–3 pm  
Daryl Beyers | Manhattan | 202GAR291

\$95/\$105

**BUILDING A GREEN WALL**

Would you like to bring the outside inside? Green walls bring a striking beauty to any room, and help create a calm, healthy environment by reducing noise, removing air toxins, and adding moisture and fresh oxygen to your living area. Discover best practices about what hardware, plants, and watering systems to use, while building a small living wall, under the guidance of interior plantscape expert Chris Raimondi.

Saturday, 10/26, 10 am–2 pm  
Chris Raimondi | Manhattan | 202LAN120A

Saturday, 1/11, 10 am–2 pm  
Chris Raimondi | NYBG | 203LAN120B

Saturday, 3/7, 10 am–2 pm  
Chris Raimondi | Manhattan | 203LAN120C

Friday, 3/13, 10 am–2 pm  
Chris Raimondi | NYBG | 203LAN120D

\$125/\$139

**INDOOR TROPICALS**

Are you looking to up your houseplant game? We can help! We'll walk you through many different species with stunning foliage or flowers—including bromeliads and palms—that will bring a hint of the sun-drenched tropics to your home. We'll discuss the light, soil, water, and maintenance requirements of a broad array of plants, so you can select which plants are right for you. You'll even pot up a small tropical to take home.

Thursday, 11/7, 10 am–1 pm  
Mary Jo Palmer | NYBG | 202GAR289A

Saturday, 2/1, 10 am–1 pm  
Colin Wright | Manhattan | 203GAR289B

Saturday, 3/21, 10 am–1 pm  
Colin Wright | Manhattan | 203GAR289C

\$95/\$105

**FRAGRANT INDOOR GARDEN**

When winter winds blow cold, bring nature inside with houseplants that provide fragrance and color all year round. Learn the full range of indoor plants with scented flowers and foliage: citrus, jasmines, hoyas, passionflowers, geraniums, orchids, herbs, bulbs, and more! Discover how to select the appropriate plant for each growing space. You'll leave class knowing how to pot, water, fertilize, and source scented plants.

Saturday, 2/29, 11 am–2 pm  
Jim Freeman | Manhattan | 203GAR223

\$65/\$69

## GARDEN MAINTENANCE

### PUT YOUR GARDEN TO BED

What can you do this fall to ensure a healthy garden next spring? Get a head start on your best garden ever by taking care of it now! Learn techniques to improve soil quality, protect perennials and tender plants through the winter, eliminate choice overwintering sites for insects and diseases, and manage all those fallen leaves.

Thursday, 10/3, 6–8 pm  
Leda Meredith | Manhattan | 202GAR185A

Friday, 10/4, 10 am–12 pm  
Leda Meredith | NYBG | 202GAR185B

\$45/\$49

### PRUNING: HOW, WHEN, AND WHERE

This one-day course covers the basics of pruning evergreens, deciduous trees, and shrubs, as well as how to maintain the woody plants in your garden. Bring your pruners! We will discuss tool selection and maintenance, while we practice techniques using potted plants (at NYBG) and trees in the landscape (at NCNC). Class is held rain or shine. Please dress for the weather and bring lunch.

Saturday, 11/2, 10 am–3 pm  
Ann Perkowski | NYBG | 202GAR236A

Saturday, 2/29, 10 am–3 pm  
Ann Perkowski | New Canaan Nature Center, New Canaan, Conn. | 203GAR236B

Sunday, 3/1, 10 am–3 pm  
John Beirne | NYBG | 203GAR236C

\$119/\$129

### NEW! ORGANIC GARDENING BASICS

Explore the philosophy and history of the organic method, the biological principles upon which it is based, and the practical techniques used to implement it. This course will cover a broad number of topics including how to build and maintain soil health, encourage biodiversity, use resources such as water and energy responsibly, and avoid using chemicals. The focus is on how restore, maintain, and enhance ecological harmony in your garden. Learn how to grow healthy plants from ornamentals to vegetables to lawns—what to do, what to avoid and why!

3 Wednesdays, 3/4–3/25 (no class 3/18),  
11 am–1:40 pm  
Renee Marsh | NYBG | 203GAR308

\$229/\$255 *Certificate Elective*

## 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.

### A KITCHEN GARDEN PLAN

Devote special new space for herbs, vegetables, fruit, and flowers for cutting. Get design inspirations for planning your own kitchen garden and discover tried-and-true small trees, shrubs, and herbaceous plants best suited to your site. Explore annuals and perennials, herbs for tea and culinary uses, and great ways to include both classic and novelty vegetables.

Sunday, 1/26, 10 am–1 pm  
Ryan McCallister | NYBG | 203GAR325

\$55/\$59 *Certificate Elective*

### ROOFTOP GARDENING

Farms and edible gardens are popping up on rooftops across the country. But rooftop spaces have their own unique challenges for soil maintenance, watering, crop management, installation, and more. Annie Novak, cofounder of America's first fully landscaped green roof commercial vegetable farm and author of the 2016 bestseller *The Rooftop Growing Guide*, shows you how to make your rooftop garden thrive. From vegetable selection to pest control to composting, you'll learn the basic tricks of the rooftop growing, covering both container and green roof gardens on rooftops and terraces.

2 Wednesdays, 2/12 & 2/19, 6:15–9:15 pm  
Annie Novak | Manhattan | 203GAR328

\$115/\$125 *Certificate Elective*

### GET MORE FROM YOUR VEGETABLE GARDEN

Abundant and delicious home-grown vegetables can be a huge commitment—so it pays to be smart with your time and labor. Learn techniques such as succession and companion planting, stacking, and vertical growing so you can enjoy a steady harvest, a wide variety of delicious vegetables, and a garden that almost takes care of itself. Imagine that!

Tuesday, 3/3, 10:30 am–1:30 pm  
Nick Storrs | NYBG | 203GAR134

\$55/\$59

### INTENSIVE GROWING TECHNIQUES FOR HOMEGROWN EDIBLES

Learn how to grow more fruit and vegetables in less space by making the most of your growing area and by extending the gardening season. Discover organic methods that take advantage of passive solar heating, vertical space, raised beds, and other techniques. Enjoy nutritious, freshly picked garden produce as early as April and then just keep on picking.

Saturday, 2/29, 10:30 am–1:30 pm  
Colin Wright | NYBG | 203GAR116A

Saturday, 3/14, 12–3 pm  
Colin Wright | Manhattan | 203GAR116B

\$59/\$65

### RAISED BED GARDENING

Raised beds are used to grow more vegetables, herbs, or ornamentals in a given area with less effort. They also help to overcome difficult situations such as wet soil, limited space, or poor light. Raised beds are ideal in many therapeutic settings as well, because they elevate the plants, bringing them closer to the patients. Methods of creating raised beds and their aesthetic considerations are discussed.

Saturday, 2/29, 2–4 pm  
Nick Storrs | NYBG | 203GAR280

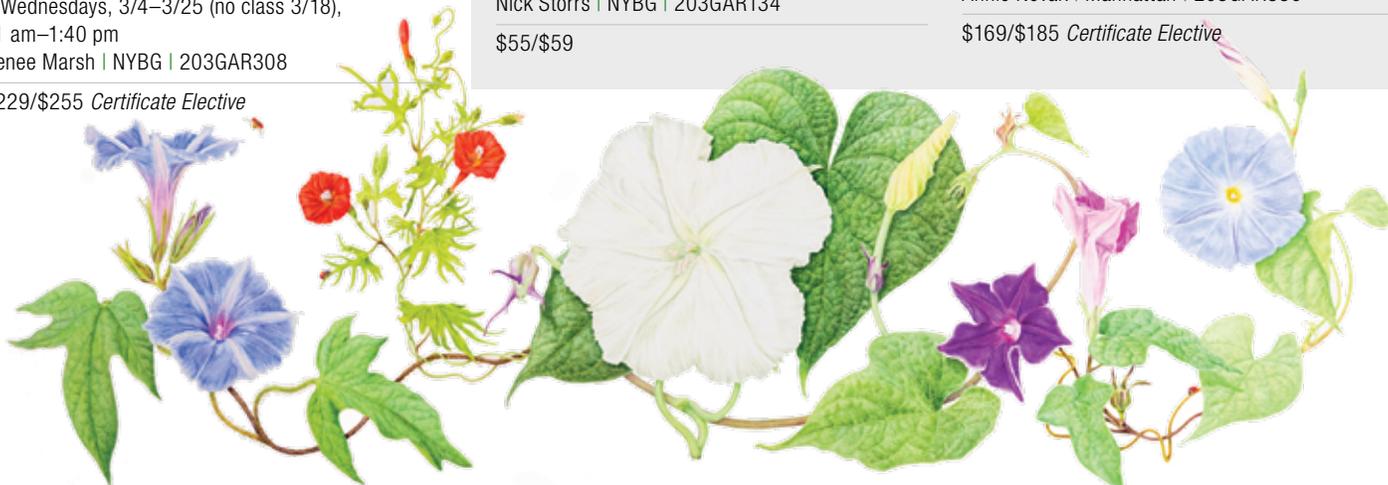
\$39/\$45

### SUPER SMALL SPACE VEGGIE GARDENING

Whether you have a terrace, rooftop, or tiny backyard, learn how to grow the most veggies in the space you have. Discover the best practices for successful small-space gardening from soil preparation to container selection and bed design, crop choices, and tips for high-yield results. Get your spring started with smart seed ordering, growing and choosing the right transplants, and strategizing for irrigation, pest management, and more. Class includes time to tailor lessons learned to your particular garden space.

3 Tuesdays, 3/10–3/31 (no class 3/17), 6–9 pm  
Annie Novak | Manhattan | 203GAR330

\$169/\$185 *Certificate Elective*



## CERTIFICATE CLASSES

### Open to Non-Certificate students

#### 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.

5 Wednesdays, 9/25–10/30 (no class 10/9),  
10:30 am–12:30 pm  
Jennifer Bakshi | NYBG | 201GAR360A

5 Thursdays, 10/24–11/21, 6:15–8:15 pm  
Jennifer Bakshi | Manhattan | 202GAR360B

5 Thursdays, 1/16–2/13, 10:30 am–12:30 pm  
Jennifer Bakshi | NYBG | 203GAR360A

5 Mondays, 3/9–4/6, 6:15–8:15 pm  
Jennifer Bakshi | Manhattan | 203GAR360C

\$255/\$279 *Certificate Elective*

#### FUNDAMENTALS OF GARDENING

*This course is also required for the Horticultural Therapy Certificate.*

Explore the basic principles underlying successful, environmentally friendly gardening, including the structure and physiological processes of plants and their relationships to the settings in which they grow. Students learn not only what to do, but why. Topics include soils and their improvement, seed sowing, vegetative propagation, planting, pruning, watering, weeding, mulching, and disease and pest control.

4 Mondays, 9/16–10/21 (no class 9/30 & 10/14),  
6–9 pm  
Manny Grossman | Manhattan | 201GAR301F

4 Tuesdays, 9/17–10/8, 10 am–1 pm  
Daryl Beyers | NYBG | 201GAR301G

4 Tuesdays, 10/15–11/5, 11 am–2 pm  
Renee Marsh | New Canaan Nature Center,  
New Canaan, Conn. | 202GAR301A

4 Tuesdays, 11/12–12/10 (no class 11/26), 10 am–1 pm  
Daryl Beyers | NYBG | 202GAR301B

4 Wednesdays, 1/8–1/29, 6 pm–9 pm  
Daryl Beyers | Manhattan | 203GAR301C

4 Fridays, 1/31–2/21, 10 am–1 pm  
Daryl Beyers | NYBG | 203GAR301D

Monday–Thursday, 3/2–3/5, 6–9 pm  
Manny Grossman | Manhattan | 203GAR301E

4 Saturdays, 3/7–3/28, 10 am–1 pm  
Michael Ruggiero | NYBG | 203GAR301F

\$295/\$325 *Certificate Requirement*

#### 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. 📌 *Prerequisite: Plants for Landscaping*

5 Tuesdays, 10/15–11/12, 10:30 am–1 pm  
Sheri Forster | NYBG | 202GAR342A

5 Thursdays, 1/9–2/6, 10:30 am–1 pm  
Sheri Forster | New Canaan Nature Center,  
New Canaan, Conn. | 203GAR342B

4 Tuesdays, 1/28–2/25 (no class 2/4), 6:15–9:15 pm  
Daryl Beyers | Manhattan | 203GAR342C

\$285/\$315 *Certificate Requirement*

#### 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*

4 Wednesdays, 10/16–11/6, 6:15–9:15 pm  
Nick Storrs | Manhattan | 202GAR431A

4 Thursdays, 11/7–12/5 (no class 11/28),  
6:15–9:15 pm  
Stephen Nocera | NYBG | 202GAR431B

4 Wednesdays, 2/5–2/26, 6:15–9:15 pm  
Nick Storrs | NYBG | 203GAR431C

\$265/\$289 *Certificate Requirement*

#### INSECT IDENTIFICATION AND MANAGEMENT

Pest identification is key to maintaining a healthy, beautiful garden. Learn to identify which insects are pests and which are beneficial to your home garden. Learn the most common orders of insects and the damage they can cause, as well as how to implement simple, non-toxic methods of preventing major insect infestations. Please bring samples of insects and damaged plants to class.

4 Wednesdays, 11/6–12/4 (no class 11/27),  
5:15–8:15 pm  
Mark Kokinchak | NYBG | 202GAR320

\$285/\$319 *Certificate Requirement*

#### 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, principles of Integrated Pest Management (IPM), organic gardening practices, and a calendar of landscape and garden tasks. 📌 *Prerequisite: Fundamentals of Gardening*

6 Mondays, 10/21–12/9 (no class 11/11 & 11/25),  
5:30–8:30 pm  
Nick Storrs | NYBG | 202GAR440

\$445/\$489 *Certificate Requirement*



#### SOIL SCIENCE FOR GARDENERS

Understand how the qualities of soil affect the overall productivity of plants and make sustainable gardening practices possible. Practical application of theory is stressed. Topics include soil formation, physical properties of soil, soil-water relationships, and management techniques such as irrigation, drainage, and fertilization. Basic soil sampling, pH, and nutrient testing are introduced. Please note that this course is not the same as *Soil Science I*.

4 Tuesdays, 1/7–1/28, 10 am–1 pm  
Manny Grossman | NYBG | 203GAR302A

4 Wednesdays, 3/11–4/1, 6–9 pm  
Manny Grossman | Manhattan | 203GAR302B

\$285/\$315 *Certificate Requirement*

#### 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. Please bring samples of diseased plants to class.

4 Wednesdays, 1/8–1/29, 5:15–8:15 pm  
Mark Kokinchak | NYBG | 203GAR324

\$285/\$319 *Certificate Requirement*

#### GARDENING WITH NATIVE PLANTS

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

3 Saturdays, 3/14–3/28, 11 am–2 pm  
TBA | Manhattan | 203GAR315

\$215/\$239 *Certificate Requirement*

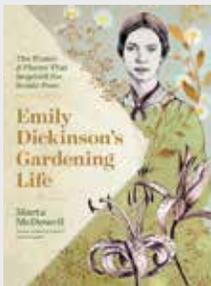


©Kirke Bent

## Emily Dickinson's Gardening Life

Marta McDowell in  
Conversation with Alice Quinn

Friday, November 1, 11 am–12:30 pm  
Mertz Library, NYBG



In her new book, *Emily Dickinson's Gardening Life*, landscape historian, NYBG instructor, and award-winning author Marta McDowell

revisits an avid gardener—and one of America's most brilliant and original poets. McDowell's beautifully illustrated talk reveals how the plants and places of Dickinson's life influenced her work, and highlights three noted botanical artists who were her contemporaries.

After her lecture, Marta will join in a lively conversation with **Alice Quinn**. The long-time head of the Poetry Society of America, Quinn was poetry editor at *The New Yorker* for two decades and currently teaches at Columbia University.

NYBG | 202GAR905 | \$10/\$20

Presented by The Humanities Institute  
Supported by The Andrew W. Mellon Foundation

## All-Day Saturday Gardening Workshops—



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### All About Containers

OCTOBER 26 | Midtown Education Center

10 am–12 pm

#### CONTAINER GARDENING 101

Container gardening requires some specialized knowledge to achieve quality results. Learn the basics for planting and maintaining a healthy outdoor container garden: materials and styles of containers, customized potting mixes, fertilization, and watering requirements. Learn which plants thrive in containers and you'll be ready to go!

Daryl Beyers | 202GAR200B

12:45–2:45 pm

#### THE VERY BEST PLANTS FOR POTS

Containers are an unnatural habitat that have fertilizer, water and root restrictions that suit some plants better than others. Find out which plants to avoid (eggplant), which ones work well (Japanese maple), and those that thrive (begonia).

Richard Rosiello | 202GAR200C

3–5 pm

#### NEW! BRIGHT, BOLD, & BEAUTIFUL FALL FOLIAGE

Punctuate your home landscape with uniquely styled containers of fall plants. Learn to use tropicals, succulents, and semi-hardy perennials with bold foliage colors, shapes, textures and sizes. Consider various container styles and how to combine these beauties in complimentary containers to express your personal aesthetic.

John Beirne | 202GAR200D

\$39/\$45 | All Three Sections: \$99/\$109  
Manhattan | 202GAR200A

### Apartment Gardener's Saturday

NOVEMBER 16 | Midtown Education Center

10 am–12 pm

#### CREATING AN INDOOR GARDEN

Successful indoor gardening requires knowledge of both plant material and growing techniques. Learn to select the right plants for various locations, based on light levels, temperatures, and aesthetics. Discuss unusual plants, tools and supplies, and maintenance such as grooming, nutrition, and pest control that will keep your plants in good shape.

Chris Raimondi, CLP | 202GAR299B

12:45–2:45 pm

#### SUCCEED WITH LOW-LIGHT PLANTS

Houseplants don't have to be dull! Find out about new and unusual plants that thrive in the light-deprived corners of your home or office. Learn how to analyze light conditions to choose the right plants for your space. Discover cultivation techniques for these shade-loving species, including fertilization, water management, and pest control. Your household flora will never be the same again!

Richard Rosiello | 202GAR299C

3–5 pm

#### GROWING HERBS INDOORS

Enjoy fresh herbs year-round by learning specific techniques for growing them indoors. Whether you want to transplant your outdoor herb garden inside, or start your kitchen herb garden from scratch, this class teaches you the essentials of managing indoor growing conditions, the best ways to harvest herbs, and how to store them for maximum flavor and fragrance.

Nick Storrs | 202GAR299D

\$39/\$45 | All Three Sections: \$99/\$109  
Manhattan | 202GAR299A

## Wake Up Your Garden Saturday

FEBRUARY 8 | NYBG

FEBRUARY 22 | New Canaan Nature Center

10 am–12 pm

### SPRING GARDENERS TASK LIST

Spring cleaning in the garden can be fun. Get shrub and herbaceous borders spruced up and looking good! Review a checklist of tasks to be performed during spring maintenance, ranging from raking off winter mulch to looking for signs of winter injury and noting where gaps in the garden can be filled. All this gives your garden a head start on a great growing season.

Daryl Beyers | NYBG | 203GAR225B

Daryl Beyers | NCNC | 203GAR225F

12:45–2:45 pm

### SOIL BASICS: GET IT RIGHT!

Rich, nutritious soil makes for large, healthy plants and reduces the need for regular fertilization. Learn the difference between soil structure and texture; how these differences affect plant growth; and how you can modify your soil to improve its qualities. Give your garden a solid foundation, and you'll reap the benefits for years to come.

Manny Grossman | NYBG | 203GAR225C

Richard Rosiello | NCNC | 203GAR225G

3–5 pm

### PRUNING: SHAPE-UP FOR SPRING

Late winter is a great time to get your woody plants in shape by thinning out overgrowth to create open, healthy, beautiful trees and shrubs. Learn how and when to prune, proper tools for the job, why pruning is necessary, and the difference between maintenance and rejuvenation pruning.

Michael Ruggiero | NYBG | 203GAR225D

Michael Ruggiero | NCNC | 203GAR225H

\$39/\$45 | All Three Sections: \$99/\$109

NYBG | 203GAR225A

NCNC | 203GAR225E



Illustration: *Phragmipedium* 'Nicole Tower' (detail), ©Carol Woodin, NYBG Instructor



## NYBG Native Plant Saturday

MARCH 28 | NYBG

10 am–12 pm

### NEW! NATIVE PLANT SELECTION

Learn what makes a plant native, how to choose the best species for your garden, where to find them, and how to grow them successfully. We'll also discuss those you can plant to support and encourage pollinators in your own landscape.

Kim Eierman | NYBG | 203GAR202B

12:45–2:45 pm

### PROPAGATING NATIVE PLANTS

Learn how to collect and sow the seeds of native plants from your local landscape or from commercial sources, and how to make more plants from your own collection through vegetative propagation techniques such as division, cuttings, and layering.

Colin Wright | NYBG | 203GAR202C

3–5 pm

### DESIGNING WITH NATIVE PLANTS

Learn the fundamentals of how native plants can be successfully incorporated into your garden plans to create sustainable garden designs filled with the beauty and diversity you desire.

Renee Marsh | NYBG | 203GAR202D

\$39/\$45 | All Three Sections: \$99/\$109

NYBG | 203GAR202A

## The Orchid Show

February 15–April 12, 2020

In celebration of this annual exhibition, we offer classes at the Garden to immerse you in the world of orchids.

### PHALAENOPSIS CARE

Myths abound about how hard it is to care for this ever-popular orchid. Frank Guida dispels those myths with plenty of sensible advice on how to treat your phalaenopsis so that it blooms year after year. Light, water, nutrients, repotting, and root care are all key. You'll pot up a phal to take home, along with the confidence you need to make your orchids thrive.

Saturday, 3/7, 11 am–1 pm

Frank Guida | NYBG | 203GAR213A

\$65/\$75

### ORCHIDS: DIVIDE, REPO, REJUVENATE

Frank Guida, Botanical Art teacher and orchid aficionado, shows you what he's learned from years assisting in NYBG's Nolen Greenhouses about when and how to divide and repot your orchids without trauma (to you or the plants!). Learn about different types of containers and potting media, while you pot up a small orchid to take home. BYOO to repot if you prefer!

Saturday, 3/14, 10 am–12:30 pm

Frank Guida | NYBG | 203GAR213B

\$65/\$75

### DESKTOP ORCHIDS

Get pro tips on how to care for orchids in less than optimal environments. Barbara Schmidt, award-winning exhibitor at the Philadelphia Flower Show and author of *Orchid Care: For the Beginner*, will walk you through what orchid genus will fare best in your indoor environment, as well as how to ensure your orchids have what they need to grow and bloom. *Optional: BYOO so Barbara can help you identify and/or troubleshoot your orchid.*

Saturday, 4/4, 11 am–1 pm

Barbara Schmidt | NYBG | 204GAR213C

\$75/\$85

### THE ORCHID SHOW Sponsors:

Mr. and Mrs. Charles M. Royce

LuEsther T. Mertz Charitable Trust

# Horticulture



©John Varriano, *Daffodil Hill*, Oil

Develop the vital skills needed to protect and manage landscapes, maintain healthy trees, design attractive gardens, and produce landscape plants. Many horticulture students start their own businesses or pursue rewarding careers in a breadth of areas, including landscaping companies, nurseries and garden centers, public parks, botanical gardens, and private estates. Enroll in a single class or pursue a Horticulture Certificate.

## THE CERTIFICATE PROGRAM

The NYBG Horticulture Program blends classroom theory with field studies in the Garden's historic landscape, teaching students how to form and care for healthy, sustainable landscapes. Courses are designed and taught by landscape professionals, botanists, and practicing horticulturists. The program offers a high standard of training in four areas of concentration:

### TRACK 1: PLANT PRODUCTION

Gain the skills to propagate and produce an array of native and non-native plants for nurseries, garden centers, and landscape-restoration projects.

### TRACK 2: SUSTAINABLE LANDSCAPE MANAGEMENT

Understand landscape maintenance and management practices using the concept "right plant—right place" in residential and commercial landscapes.

### TRACK 3: ARBORICULTURE

Know how to grow, prune, care for, and manage trees in parks, residential sites, and urban environments.

### TRACK 4: SUSTAINABLE GARDEN DESIGN

Be able to design small-scale gardens for homes, communities, and private clients.

## CERTIFICATE REQUIREMENTS

Course	Code	Hours*	Page
<b>TRACK 1</b>			
<b>Plant Production</b>			
Introduction to Plant Science	HRT 300	16	37
Soil Science I: Physical Properties	HRT 301	18	37
Soil Science II: Chemistry and Nutrition	HRT 302	<b>P</b> 18	37
Horticultural Techniques: Greenhouse Practices	HRT 312	<b>P</b> 15	38
Insect Pests of Landscape Plants**	HRT 381	<b>P</b> 18	—
Plant Propagation I: Basic Principles	HRT 411	<b>P</b> 18	38
Plant Propagation II: Applications	HRT 412	<b>P</b> 16	39
Disease Identification & Management	HRT 481	<b>P</b> 18	38
Nursery and Greenhouse Management	HRT 491	<b>P</b> 24	38
<b>TOTAL REQUIRED HOURS</b>		<b>161</b>	

\*Course hours do not include exam hours

\*\*Courses offered in the Spring–Summer Catalog

**P** Courses with a prerequisite before you can register

For professional horticultural organizations, see p. 59.



The Program Coordinator, Charles Yurgalevitch, Ph.D., is the Director of the Garden's School of Professional Horticulture. A professional urban horticulturist and educator, he is an ISA-certified arborist and serves as President on the Board of Directors of the Metro Hort Group. Previously he was with the University of Florida's Extension Service, where he developed programs for arborists, landscape architects, and the commercial landscape industry. He has a B.S. in plant science from the University of Rhode Island and a Ph.D. in horticulture from Rutgers University.



**GET NYBG  
CERTIFIED**

The increasing concern for environmental quality, conservation, and restoration is driving jobs in the horticulture industry—which will grow 18% in the next decade, according to the Bureau of Labor Statistics. In public parks and private gardens nationwide, demand continues for native, easily maintained landscapes. The NYBG Horticulture Certificate is a serious credential that helps professionals enhance their profile, as well as individuals exploring new green careers. It's a unique opportunity for rigorous study with landscape professionals and horticulture experts on the grounds of America's premier urban garden.

**QUESTIONS? CONTACT PROGRAM  
COORDINATOR CHARLES YURGALEVITCH,  
PH.D., AT [HRTCARDINATOR@NYBG.ORG](mailto:HRTCARDINATOR@NYBG.ORG)**

## CERTIFICATE REQUIREMENTS

Course	Code	Hours*	Page
<b>TRACK 2</b>			
<b>Sustainable Landscape Management</b>			
Introduction to Plant Science	HRT 300	16	37
Soil Science I: Physical Properties	HRT 301	18	37
Soil Science II: Chemistry and Nutrition	HRT 302 <b>P</b>	18	37
Horticultural Techniques: Landscape Gardening	HRT 311 <b>P</b>	18	38
Pruning Principles and Practices	HRT 321 <b>P</b>	15	39
Basic Design and Installation of Irrigation Systems	HRT 323	12	39
Starting a Small Landscaping Business	HRT 349	14	39
Insect Pests of Landscape Plants**	HRT 381 <b>P</b>	18	—
Tree Management	HRT 422 <b>P</b>	14	39
Landscape Management	HRT 443 <b>P</b>	24	38
Disease Identification & Management	HRT 481 <b>P</b>	18	38
Weed Identification & Management	HRT 482 <b>P</b>	12	38
Mathematics for Horticulturists	HRT 356	6	39
TOTAL REQUIRED HOURS		209	
<b>TRACK 3</b>			
<b>Arboriculture</b>			
Introduction to Plant Science	HRT 300	16	37
Soil Science I: Physical Properties	HRT 301	18	37
Soil Science II: Chemistry and Nutrition	HRT 302 <b>P</b>	18	37
Tree Climbing for Arborists**	HRT 304	15	—
Chainsaws: Use, Safety, and Maintenance	HRT 308	6	39
Pruning Principles and Practices	HRT 321 <b>P</b>	15	39
Landscape Plants: Fall Trees and Shrubs	HRT 331 <b>P</b>	12	39
Landscape Plants: Conifers	HRT 333 <b>P</b>	12	37
Landscape Plants: Spring Trees and Shrubs**	HRT 334 <b>P</b>	12	—
Insect Pests of Landscape Plants**	HRT 381 <b>P</b>	18	—
Tree Management	HRT 422 <b>P</b>	14	39
Urban Tree Care	HRT 426 <b>P</b>	12	39
Winter Tree Identification	HRT 440 <b>P</b>	8	39
Disease Identification & Management	HRT 481 <b>P</b>	8	38
TOTAL REQUIRED HOURS		194	
<b>TRACK 4</b>			
<b>Sustainable Garden Design</b>			
Introduction to Plant Science	HRT 300	16	37
Soil Science I: Physical Properties	HRT 301	18	37
Landscape Plants: Broadleaved Evergreens	HRT 332 <b>P</b>	9	37
Landscape Plants: Spring Trees and Shrubs**	HRT 334 <b>P</b>	12	—
Landscape Plants: Spring Perennials**	HRT 336 <b>P</b>	9	—
Landscape Plants: Late Season Perennials & Grasses	HRT 338 <b>P</b>	12	37
Landscape Plants: Annuals**	HRT 341 <b>P</b>	8	—
Landscape Plants: Bulbs	HRT 342 <b>P</b>	12	38
Annual and Perennial Garden Maintenance	HRT 344 <b>P</b>	8	38
Plants for Landscaping	HRT 358	16	37
Tropical Plants**	HRT 361 <b>P</b>	14	—
Sustainable Garden Design	HRT 551 <b>P</b>	20	38
Landscape Design History	LAN 301	24	46
Graphics I: Hand Rendering	LAN 311	24	47
TOTAL REQUIRED HOURS		199	

\*Course hours do not include exam hours

\*\*Courses offered in the Spring–Summer Catalog

**P** Courses with a prerequisite before you can register  
For professional horticultural organizations, see p. 59.*New Trends in Horticulture***NEW! NEW TECHNOLOGIES FOR URBAN FARMING**

As urban populations expand and access to arable land and potable water shrinks, agri-entrepreneurs are turning to innovative systems to grow food indoors without soil—*aeroponics*, *aquaponics*, and *hydroponics*. Three NYC-based experts—Kathleen DeBrotta, Plant Scientist at AeroFarms; Yemi Amu, Co-Founder and Farm Manager at Oko Farms; and Tobias Peggs, Founder & CEO of Square Roots—will explain how their systems currently produce high-quality food and discuss what these new technologies mean for agriculture, climate, and culture today. Moderated by Charles Yurgalevitch, Ph.D., Director, School of Professional Horticulture.

Thursday, 1/16, 6:15–8:15 pm | Manhattan | 203HRT155 | \$29/\$35

**NEW! GROWING CANNABIS**

Mass production methods for growing cannabis differ from those used by boutique or “craft” growers. Learn best practices for growing in a greenhouse or outdoors, and examine the pros and cons of using different hydroponics systems. Discover natural ways to control pests and keep your plants healthy and get a serious overview of the legal, financial, and public health obligations associated with growing cannabis.

4 Sundays, 1/26–2/23 (no class 2/16), 11 am–2 pm

Kelley Crosson | NYBG | 203HRT156

\$195/\$215

**INTRODUCTION TO HYDROPONICS**

Explore how to grow plants without soil using hydroponics, which promotes fast growth and requires less water and space than conventional gardens. You’ll learn what systems work best, which plants to choose, and how to make sure they get proper nutrition. While we will focus primarily on home-scale systems, the wider applications of hydroponics will also be discussed.

5 Tuesdays, 2/4–3/3, 6:15–8:15 pm

Maya Kutz &amp; Kate Lodvikov | Manhattan | 203HRT141

\$195/\$215

**Hydroponic Towers at Square Roots****CUT FLOWER FARMING**

Join the cut flower farming revolution! Discover the basics of how to design, plant, grow, and harvest a cutting garden that will be productive throughout the seasons. You’ll get hands-on practice starting seeds to ensure you always have something fresh to cut. We will also cover traditional and unexpected annual and perennial cut flower species and varieties that grow well locally.

2 Thursdays, 2/6 &amp; 2/13, 6:15–8:15 pm

Anne Marie Breyer | Manhattan | 203HRT142

\$135/\$149

## Sustainability Intensive— A One-Week Workshop

Ten three-hour sessions over 5 days, taught by regional experts combine field lectures, classroom case studies, and Garden site tours for a firm foundation in ecological design and sustainable practice.

**Day 1 Sustainable Landscapes as Ecosystems**

**Day 2 Soil Principles and Practices**

**Day 3 Hydrology and Irrigation**

**Day 4 Plant Health Care Practices**

**Day 5 Plant Selection and Design**

Monday–Friday, 9/30–10/4, 9 am–3 pm  
\$695/\$795 | NYBG | 201HRT490

**For session details, CEUs, and instructor bios visit our website.**

### CERTIFICATE CLASSES

#### INTRODUCTION TO PLANT SCIENCE

##### ALL TRACKS

A user-friendly introduction to plant science, this course surveys the major groups of plants—flowering plants, conifers, ferns, and bryophytes—focusing on plant form and structure. Learn about the relationships between appearance and function, ecology, systematics, and evolution, and become botanically literate. Gain practical experience in dissecting and analyzing plant structures.

7 Saturdays, 9/14–11/2 (no class 10/12),  
10 am–12:40 pm  
Christopher Satch | Manhattan | 201HRT300E

7 Thursdays, 9/19–10/31 (no class 10/12),  
10:30 am–1:10 pm  
Anya Paltseva | NYBG | 201HRT300F

7 Fridays, 10/25–12/13 (no class 11/29),  
10 am–12:40 pm  
Steve Kutos | NYBG | 202HRT300A

7 Sundays, 10/20–12/8 (no class 11/10),  
10:30 am–1:10 pm  
Elle Barnes | NYBG | 202HRT300B

7 Wednesdays, 10/23–12/11 (no class 11/27),  
6–8:40 pm  
Manny Grossman | Manhattan | 202HRT300C

Mondays, Wednesdays, Fridays, 1/6–1/22 (no class 1/20),  
10 am–12:40 pm  
Manny Grossman | NYBG | 203HRT300D

4 Tuesdays and 3 Thursdays, 1/7–1/30 (no class 1/16),  
6–8:40 pm  
Manny Grossman | Manhattan | 203HRT300E

7 Saturdays, 1/25–3/14 (no class 2/15),  
10:30 am–1:10 pm  
Elle Barnes | NYBG | 203HRT300F

7 Saturdays, 2/1–3/21 (no class 2/15),  
10 am–12:40 pm  
Christopher Satch | Manhattan | 203HRT300G

7 Tuesdays, 2/4–3/17 (no class 2/18),  
10 am–12:40 pm  
Steve Kutos | NYBG | 203HRT300H

\$395/\$435

#### SOIL SCIENCE I: PHYSICAL PROPERTIES

##### 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 labs using microscopes, learn irrigation and drainage techniques and explore how soil, organic matter, and microbiology relate to plant health and soil conservation.

7 Thursdays, 9/19–10/31 (no class 10/12),  
2–5 pm  
Anya Paltseva | NYBG | 201HRT301C

7 Mondays, 10/28–12/16 (no class 11/11),  
10:30 am–1:30 pm  
Manny Grossman | NYBG | 202HRT301A

7 Mondays, 1/27–3/23 (no class 2/17 & 3/2),  
6–9 pm  
Manny Grossman | Manhattan | 203HRT301B

7 Saturdays, 1/25–3/14 (no class 2/15),  
10:30 am–1:30 pm  
Anya Paltseva | NYBG | 203HRT301C

7 Wednesdays, 1/22–3/4 (no class 2/15),  
6–9 pm  
Manny Grossman | NYBG | 203HRT301P

7 Wednesdays, 2/5–3/18 (no class 2/19),  
10 am–1 pm  
George Lozefski | NYBG | 203HRT301S

7 Tuesdays, 3/24–5/5 (no class 4/11),  
10:30 am–1:30 pm  
Anya Paltseva | NYBG | 203HRT301E

\$455/\$495

#### SOIL SCIENCE II: CHEMISTRY AND NUTRITION TRACKS 1, 2, & 3

Learn how to nurture the soil so it can sustain your plants. Go beyond basic soil chemistry, by understanding the ionic exchange capacities of soil, as well as how a soil's pH affects what nutrients are available to plants. Explore the complex nitrogen cycle, and the use of composted soil amendments, and fertilizers. In addition, analyze your own soil sample, and discover how soil and plant tissue tests can help monitor plant nutrition and health.

**Prerequisite:** *Soil Science I*

7 Wednesdays, 12/4–1/29 (no class 12/25 & 1/1),  
2–5 pm  
George Lozefski | NYBG | 202HRT302S

7 Tuesdays, 1/14–2/25 (no class 1/20),  
10 am–1 pm  
George Lozefski | NYBG | 203HRT302A

\$395/\$445

#### LANDSCAPE PLANTS: CONIFERS TRACK 3

Learn the identification, classification, and landscape use of native and non-native conifers that thrive in the northeastern United States. Major plant groups studied include *Chamaecyparis*, *Picea*, and *Pinus*. Gain a working knowledge of the best species and cultivars of conifers for naturalistic and formal landscape designs.

**Prerequisite:** *Introduction to Plant Science*

7 Tuesdays, 11/12–1/7 (no class 12/24 & 12/31),  
1:30–3:30 pm  
Michael Ruggiero | NYBG | 202HRT333S

7 Wednesdays, 2/5–3/18 (no class 2/19),  
2–4 pm  
Michael Ruggiero | NYBG | 203HRT333B

\$295/\$325

#### 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.

**Prerequisite:** *Introduction to Plant Science*

5 Saturdays, 9/14–10/19 (no class 10/12),  
11 am–2 pm  
Michael Hagen | NYBG | 201HRT338A

5 Tuesdays, 10/1–10/29 (no class 10/12),  
10 am–1 pm  
Michael Ruggiero | NYBG | 202HRT338B

\$295/\$325

#### PLANTS FOR LANDSCAPING TRACK 4

Examine the use of plants in the landscape with an emphasis on choosing the right plant for the right place, based on site-specific design and maintenance criteria. Learn aspects of special landscape values such as size, texture, color, and flowering and fruiting seasons. Review the trees, shrubs, groundcovers, annuals, and perennials suitable for landscaping in this region.

6 Tuesdays, 9/17–11/5 (no class 9/24 & 10/8),  
6:15–8:50 pm  
Michael Ruggiero | NYBG | 201HRT358C

6 Fridays, 9/20–10/25, 10 am–12:40 pm  
Valerie D'Antonio | NYBG | 201HRT358D

6 Thursdays, 10/3–11/7, 10 am–12:40 pm  
Michael Ruggiero | New Canaan Nature Center,  
New Canaan, Conn. | 202HRT358A

6 Saturdays, 10/5–11/16 (no class 10/12),  
10:30 am–1:10 pm  
Manny Grossman | NYBG | 202HRT358B

6 Wednesdays, 10/16–11/20, 10 am–12:40 pm  
Timothy Nolan | NYBG | 202HRT358C

6 Saturdays, 3/28–5/9 (no class 4/11),  
10:30 am–1:10 pm  
Valerie D'Antonio | NYBG | 203HRT358D

\$395/\$435

#### LANDSCAPE PLANTS: BROADLEAVED EVERGREENS TRACK 4

Learn native and non-native broadleaved evergreens; become familiar with their cultural requirements, identification features, and landscape uses.

Learn how to incorporate this important group of plants into both naturalistic and formal landscape settings. Major plant groups studied include *Ilex*, *Rhododendron*, *Buxus*, and evergreen groundcovers.

**Prerequisite:** *Introduction to Plant Science*

5 Fridays, 9/27–10/25 (no class 10/12),  
10 am–12:15 pm  
Manny Grossman | NYBG | 201HRT332A

5 Tuesdays, 10/1–11/5 (no class 10/8),  
4:30–6:30 pm  
Sean Tarantino | NYBG | 202HRT332S

5 Saturdays, 11/9–12/14 (no class 11/30),  
10:30 am–12:45 pm  
Vincent Simeone | NYBG | 202HRT332B

\$219/\$239

 Exam on last class date.

**LANDSCAPE PLANTS: BULBS** TRACK 4

This course is designed for horticulturists, gardeners, or designers who want to learn to identify and classify familiar and unusual spring-, summer-, and autumn-flowering bulbs. We will also focus on understanding their biology. **Prerequisite:** *Introduction to Plant Science*

7 Wednesdays, 3/11–4/22, 4–6 pm  
Marta McDowell | NYBG | 203HRT342A

7 Thursdays, 3/12–4/30 (no class 4/16),  
4:30–6:30 pm  
Michael Hagen | NYBG | 203HRT342S

\$295/\$325

**DISEASE IDENTIFICATION & MANAGEMENT**  
TRACKS 1, 2, & 3

Learn about common diseases of woody and herbaceous ornamentals and turfgrass caused by bacteria, fungi, nematodes, viruses, and abiotic factors and the cultural, biological, and least toxic strategies for their control. Discuss diagnoses of plant problems, including identification of disease- and nutrient-related symptoms. **Prerequisite:** *Introduction to Plant Science*

7 Wednesdays, 9/4–10/23 (no class 10/9),  
12:30–3:30 pm  
Mark Kokinchak | NYBG | 201HRT481S

7 Saturdays, 9/14–11/2 (no class 10/12),  
10 am–1 pm  
Mark Kokinchak | NYBG | 201HRT481B

\$475/\$495

**PLANT PROPAGATION I** TRACK 1

Learn the principles and techniques of plant propagation by seed and cuttings. Explore the basics of sexual and asexual propagation, with attention to fruit development, seedling production, root initiation, stem and leaf cuttings, and layering. **Prerequisite:** *Introduction to Plant Science*

7 Mondays, 9/16–11/11 (no class 9/30 & 10/14),  
5:45–8:45 pm  
Mobe Weinstein | NYBG | 201HRT411S

7 Tuesdays, 9/17–11/5 (no class 10/8),  
5:45–8:45 pm  
Nick Storrs | NYBG | 201HRT411P

7 Mondays, 1/27–3/16 (no class 2/17),  
10:30 am–1:30 pm  
Michael Ruggiero | NYBG | 203HRT411A

7 Tuesdays, 1/28–3/10, 1:30–4:30 pm  
Michael Ruggiero | NYBG | 203HRT411B

\$479/\$525

**LANDSCAPE GARDENING** TRACK 2

Learn the basic techniques of landscape gardening, with an emphasis on ecologically appropriate practices. Topics include soil preparation, efficient water and fertilization practices, planting and transplanting, cultivation techniques, and maintaining healthy plants. **Prerequisites:** *Introduction to Plant Science* and *Soil Science I*

7 Tuesdays, 3/10–4/21, 4:30–7:30 pm, and  
Tuesday, 3/24, 10 am–4 pm, (rain date 3/25,  
10 am–4 pm)  
Mobe Weinstein | NYBG | 203HRT311P

\$455/\$495

**NURSERY & GREENHOUSE MANAGEMENT**

TRACK 1

Learn the basic principles and best practices of greenhouse and nursery construction and design, and commercial greenhouse and field plant production. Understand how to manage a commercial growing operation, including site selection, planning and layout, and production methods of greenhouse and nursery crops, both in the field and in containers. The course includes a field trip to area nurseries.

**Prerequisite:** *Introduction to Plant Science*

8 Tuesdays, 10/15–12/3, 4:30–7:05 pm, Plus an  
all-day field trip Friday, 11/1, 8 am–4 pm  
Marc Hachadourian | NYBG | 202HRT491S

\$549/\$605

**LANDSCAPE MANAGEMENT** TRACK 2

Examine the most important factors in the management and maintenance of commercial and residential landscapes using sustainable techniques. Learn to develop programs that reduce adverse effects on the environment, including alternative approaches to conventional lawn management. Focus on how to keep plants healthy, solve problems, and maximize resource allocation. **Prerequisites:** *Introduction to Plant Science* and *Soil Science II*

2 Thursdays, 10/10 & 10/17,  
6 Wednesdays, 10/16–12/4 (no class 11/6),  
& 3 Tuesdays, 11/5, 11/19, & 11/26, 1–4 pm  
Kurt Morrell | NYBG | 202HRT443S

9 Thursdays, 2/27–4/23, 4–7 pm  
David Laswell | NYBG | 203HRT443P

\$579/\$635

**WEED ID & MANAGEMENT** TRACK 2

Learn how to identify and manage the common turf and landscape weeds found in residential and commercial sites. Examine a variety of weed control methods, including herbicides and non-chemical approaches. Study weed biology, biochemical pathways, and equipment calibration and care, as well as seasonal weed control programs.

**Prerequisite:** *Introduction to Plant Science*

5 Wednesdays, 10/16–11/13, 4:30 pm–7:30 pm  
David Laswell | NYBG | 202HRT482S

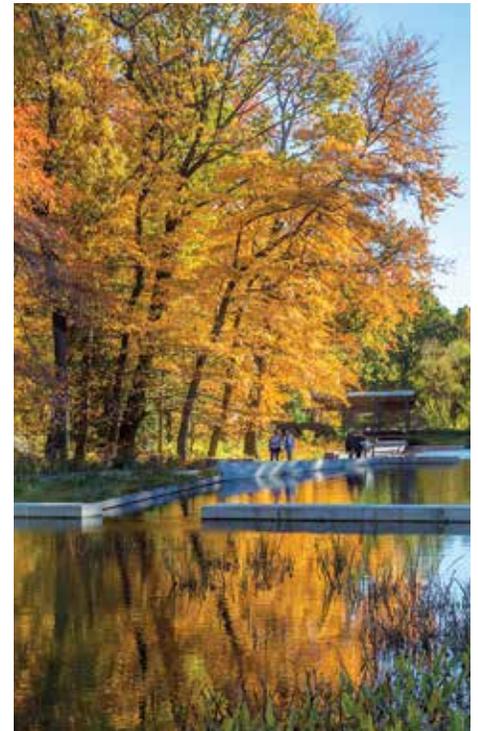
\$355/\$395

**GREENHOUSE PRACTICES** TRACK 1

This course introduces students to the practical skills required for growing plants in greenhouses with an emphasis on integrated management techniques. Topics include structures and equipment, soils and other growing media, irrigation and fertilization practices, potting and repotting, and cultural practices. **Prerequisites:** *Introduction to Plant Science* and *Soil Science I*

6 Thursdays, 10/17–11/21, 4–7 pm  
Nick Gershberg | NYBG | 202HRT312P

\$359/\$395

**SUSTAINABLE GARDEN DESIGN** TRACK 4

Learn the fundamental principles of design in this studio-oriented course, including site analysis, schematic and finished planting plans, and various garden styles. Study the effective use of color when selecting specific garden plants and learn various color schemes such as analogous or sequential, complementary, and monochrome. Visual presentations, discussions, and design projects combine practical information with the more theoretical aspects of garden design. Review flowering trees, shrubs, perennials, annuals, and bulbs. A list of required materials will be provided. **Prerequisites:** *Graphics I*, *Landscape Plants: Annuals*, *Landscape Plants: Spring Perennials* and *Landscape Plants: Summer and Fall Perennials*

7 Saturdays, 10/26–12/14 (no class 11/2 & 11/30),  
10 am–12:50 pm  
Laura McKillop | NYBG | 202HRT551

7 Mondays, 2/24–4/6, 6:15–9:05 pm  
Laura McKillop | NYBG | 203HRT551A

\$485/\$535

**ANNUAL AND PERENNIAL GARDEN  
MAINTENANCE** TRACK 4

Learn how to manage annual and perennial gardens using a variety of in-season and post-season maintenance practices. Topics include soil and weed management, watering, basic pest identification and control, and seasonal clean-up. Develop a management plan for a small perennial garden. **Prerequisites:** *Soil Science I* and *Plants for Landscaping* or *Landscape Plants: Perennials*

4 Sundays, 1/26–2/23 (no class 2/16),  
10 am–12:40 pm  
Deirdre Carsto | NYBG | 203HRT344

\$195/\$215

**PLANT PROPAGATION II** TRACK 1

Through lectures, laboratories, and field trips, learn how to work with plants that are difficult to propagate by seed or cuttings. Subjects include advanced seed propagation and techniques of grafting, budding, and micro-propagation. Learn about tissue culture at the Garden's Pfizer Laboratory, and tour a retail nursery for a hands-on grafting project that you can take home. **P** Prerequisite: *Plant Propagation I*

4 Mondays, 1/27–2/24 (no class 2/18), 5–8 pm,  
Plus an all-day field trip TBA, 8 am–4 pm  
Mobee Weinstein | NYBG | 203HRT412S

4 Tuesdays, 1/28–2/25 (no class 2/18), 5–8 pm,  
Plus an all-day field trip TBA, 8 am–4 pm  
Mobee Weinstein | NYBG | 203HRT412A

\$395/\$435

**PRUNING PRINCIPLES AND PRACTICES**

TRACKS 2 & 3

Through course study and hands-on pruning, you will learn the best tools, techniques, and timing to use when you prune to help shrubs, conifers, broadleaves, evergreens, and deciduous plants thrive. Explore how woody plant structure and physiology influence pruning. You'll learn how to create and maintain hedges and become familiar with authentic pollarding techniques. **P** Prerequisite: *Introduction to Plant Science*

6 Thursdays, 10/31–12/12 (no class 11/28), 2–5 pm  
Bill Logan | NYBG | 202HRT321A

6 Fridays, 11/1–12/13 (no class 11/29), 10 am–1 pm  
Bill Logan | NYBG | 202HRT321B

6 Tuesdays, 11/5–12/17 (no class 11/26),  
10 am–1 pm  
Bill Logan | NYBG | 202HRT321C

6 Fridays, 1/24–2/28 (no class 2/18), 10 am–1 pm  
Bill Logan | NYBG | 203HRT321P

6 Saturdays, 1/25–3/7 (no class 2/15), 1–4 pm  
Samuel Bishop | NYBG | 203HRT321E

6 Thursdays, 2/6–3/12 (no class 2/13), 1–4 pm  
Bill Logan | NYBG | 203HRT321S

\$385/\$425

**BASIC DESIGN AND INSTALLATION OF IRRIGATION SYSTEMS**

TRACK 2

Learn how to design, install, and maintain conventional, specialty drip, and micro-drip irrigation systems. Drip systems are useful for rooftop and terrace gardens, planters, raised beds, and many landscape and nursery production systems. We will cover basic hydraulics and review the best irrigation products. Learn to troubleshoot, practice visual maintenance, and identify service requirements.

Thursday & Friday, 1/9 & 1/10, 10 am–4:30 pm  
Steve Dobossy | NYBG | 203HRT323

\$295/\$329

 Exam on last class date.

**STARTING A SMALL LANDSCAPING BUSINESS**

TRACK 2

Discover the details of making a landscaping business work. Explore the type of business to create: design, installation, construction, maintenance, estimating or some combination. Learn about legal requirements, advertising, customer relations, and human resources. Discuss the monetary aspects: start-up costs, operating budget, tracking costs, and writing contracts.

4 Fridays, 1/31–2/21, 10 am–1:20 pm  
Jay Petrow | NYBG | 203HRT349

\$329/\$369

**TREE MANAGEMENT**

TRACKS 2 & 3

Explore a holistic approach to keeping trees healthy and vigorous. Topics include planting and transplanting, pruning, fertilization, root system management, common problems, tree defenses, and lightning protection. Samples of tree problems, supplies, and tools are exhibited. **P** Prerequisites: *Pruning Principles and Practices* and *Soil Science II*

7 Wednesdays, 1/8–2/19 (no class 1/13), 5:30–7:30 pm  
Wayne Cahilly | NYBG | 203HRT422S

\$335/\$369

**WINTER TREE IDENTIFICATION**

TRACK 3

Learn the basic techniques of winter tree ID using dormant-season characteristics. Buds, bark, fruit, and growth habits on deciduous plants as well as unique aspects of conifers are taught. Specialized techniques and tools of the trade are discussed.

**P** Prerequisite: *Introduction to Plant Science*

5 Thursdays, 1/9–2/6 (no class 1/13), 1–3 pm  
Bill Logan | NYBG | 203HRT440

\$295/\$325

**CHAINSAWS: USE, SAFETY, AND MAINTENANCE**

TRACK 3

Whether you are a budding arborist or weekend woodcutter, you must know how to use your chainsaw safely and maintain it properly. This lecture course by an ISA-certified arborist teaches you the basics of chainsaw use and care, sharpening, and bar tensioning. No chainsaw will be handled in class.

Sunday, 2/2, 9 am–3:30 pm  
Julian Picciano | NYBG | 203HRT308

\$145/\$159

**URBAN TREE CARE**

TRACK 3

Learn how trees survive the many perils of the urban environment. Soil compaction, construction damage, and land development practices can lead to tree decline and early mortality in trees. Examine the biology of trees, and learn how they respond to changes in the urban environment, particularly their response to natural and man-made stress. Explore techniques for assessing and preserving tree health and vigor, as well as new diagnostic tools and methods for tree and site analysis in developed urban sites. **P** Prerequisite: *Introduction to Plant Science*

5 Saturdays, 3/21–4/25 (no class 4/11), 11 am–2 pm  
Julian Picciano | NYBG | 203HRT426

\$295/\$325

**FALL TREES AND SHRUBS**

TRACK 3

Explore how to identify and use major groups of shade trees and shrubs native to and hardy in our region in the landscape, including *Acer*, *Quercus*, and *Viburnum*, which are particularly ornamental in fall. The class goes out on the Garden grounds rain or shine. **P** Prerequisite: *Introduction to Plant Science*

5 Sundays, 9/15–11/3 (no class 9/22, 9/29 & 10/13), 10 am–1 pm  
Michael Ruggiero | NYBG | 201HRT331A

5 Sundays, 9/15–11/3 (no class 9/22, 9/29 & 10/13), 1:30 pm–4:30 pm  
Michael Ruggiero | NYBG | 201HRT331B

7 Wednesdays, 10/2–11/20 (no class 10/9), 4:30–6:30 pm  
Michael Ruggiero | NYBG | 202HRT331C

\$295/\$325

**MATHEMATICS FOR HORTICULTURISTS**

TRACK 2

This course is designed for horticulturists who are responsible for maintaining or directing the maintenance of outdoor landscapes. Methods of calculating areas, application rates for fertilizers, and amounts of soil amendments are reviewed during the first session, and a set of homework problems is analyzed during the second session.

3 Mondays, 3/23–4/6, 4:30–6:30 pm  
Mobee Weinstein | NYBG | 203HRT356

\$149/\$165

## Certification Exams

**30-HOUR PREP FOR PESTICIDE APPLICATOR CERTIFICATION EXAM**

Prepare for the Core (Basic) and Category 3 (Ornamentals and Turf) exams required by Department of Environmental Conservation. We'll cover the handling, use, storage, and application of pesticides; safety and environmental considerations; and insect and disease problems. You must have either three years of work experience or 30 hours of class instruction to be eligible to take these exams. DEC CEUs available.

4 Tuesdays, 1/7–2/4, and 5 Thursdays,  
1/9–2/6 (no class 1/28), 4:15–8:45 pm  
Shawn Spencer | NYBG | 203HRT357S

\$715/\$785

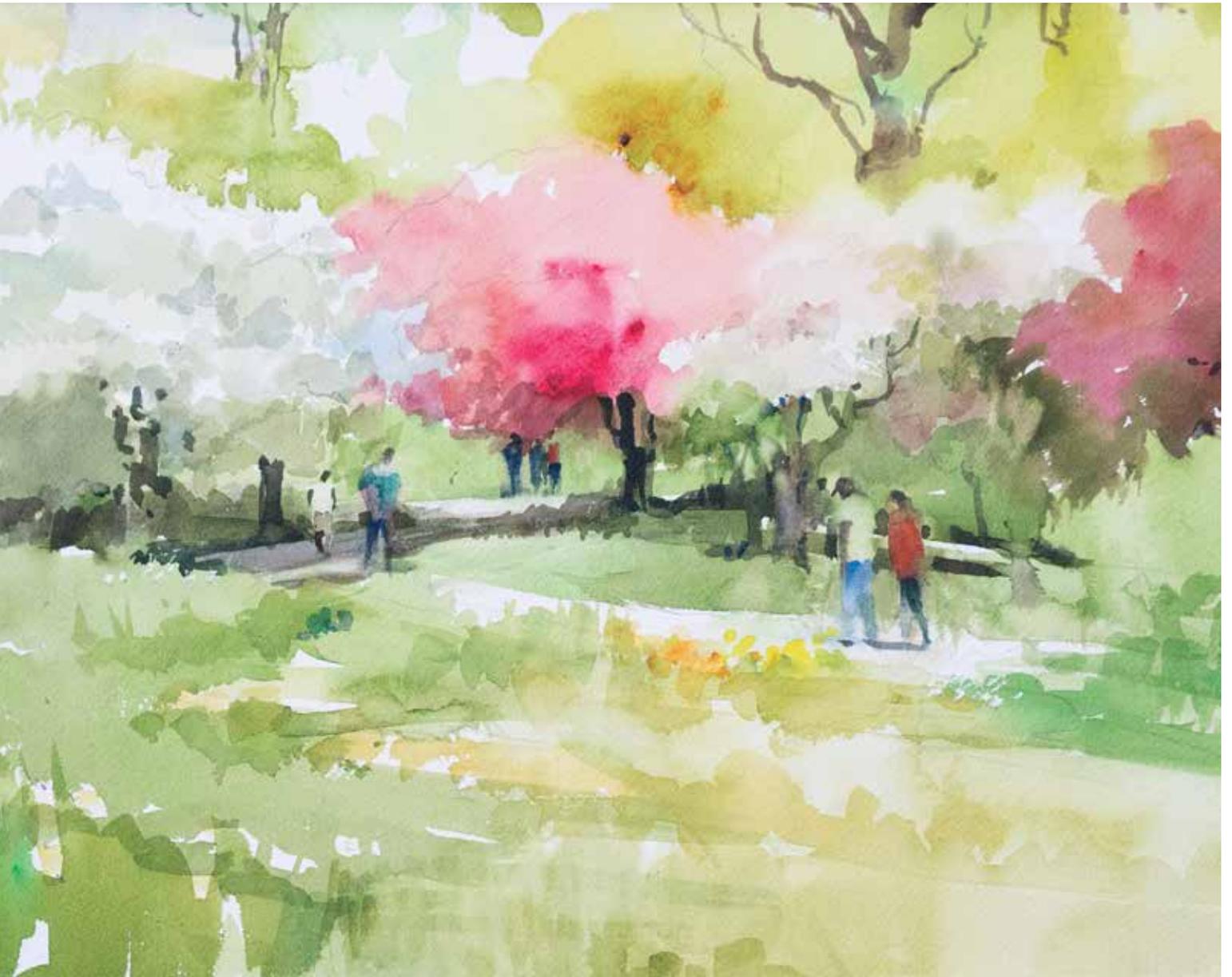
**ISA ARBORIST CERTIFICATION EXAM PREPARATION COURSE**

Prepare for the International Society of Arboriculture Certified Arborist exam by reviewing each chapter in the ISA Arborists' Certification Study Guide, available for purchase at NYBG Shop. Approved for CEUs.

Saturday, 10/26, 9 am–5:45 pm  
Julian Picciano & Wayne Cahilly | NYBG  
202HRT150

NYBG or ISA Members \$189/Non-Member \$209

# Horticultural Therapy



©Susan Weintraub, *Crabapples*, Watercolor

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

The NYBG Horticultural Therapy Certificate Program helps students begin or complement their careers through an in-depth exploration of skills and innovative methods using plants and the growing environment to heal and rehabilitate people. Taught by practicing horticultural therapists, this program trains students in the design, implementation, and operation of programs for individuals and groups in a wide 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 (181 required + 8 site visit hours), plus a 100-hour internship. After completing a minimum of six courses required for a Horticultural Therapy Certificate, students should contact the Program Coordinator to arrange for their internship. To be considered for graduation on June 7, 2020, all internship documentation must be submitted to the Registration Office by May 8, 2020.

Course	Code	Hours	Page
Introduction to Horticultural Therapy	THR 301	15	42
Horticultural Therapy for Exceptional Youth	THR 402 <b>P</b>	15	42
Horticultural Therapy for Physical Rehabilitation	THR 403 <b>P</b>	15	42
Horticultural Therapy for Older Adults	THR 401 <b>P</b>	15	42
Fundamentals of Gardening	GAR 301	12	31
Horticultural Therapy in Behavioral Health Settings	THR 404 <b>P</b>	15	42
Horticultural Therapy Methods and Materials	THR 406 <b>P</b>	15	43
Activities Analysis for Horticultural Therapy	THR 407 <b>P</b>	15	43
Introduction to Plant Science	HRT 300	16	37
Plant Propagation I: Basic Principles	HRT 411 <b>P</b>	18	38
Garden Design for Special Populations	THR 408 <b>P</b>	15	43
Horticultural Therapy Program Management	THR 409 <b>P</b>	15	43
Horticultural Therapy Site Visits (see list below)		8	43
<b>TOTAL REQUIRED HOURS</b>		<b>189</b>	

Site Visits	Code	Hours	Page
NYU Langone Medical Center, Therapeutic Horticulture Services	THR 525 <b>P</b>	5	43
The HSNY's GreenHouse Program on Rikers Island	THR 537 <b>P</b>	6	43
Cardinal Cooke Health Center	THR 528 <b>P</b>	4	43

**P** Courses with a prerequisite before you can register



The Program Coordinator, Phyllis D'Amico, HTM, is a registered horticultural therapist with the American Horticultural Therapy Association and has worked in the field for more than 30 years. Phyllis created an award-winning horticultural therapy program for special needs students at the New Jersey Regional Day School in Newark, where she is the lead science teacher and horticultural therapist. Phyllis earned a Certificate in Horticultural Therapy from the Botanical Garden, where she has been an instructor for more than 25 years.

## GET NYBG CERTIFIED

Given America's green movement, aging demographics, and evolving approaches to health care, Horticultural Therapy is one of the real growth sectors in hospitals, rehabilitation centers, schools, prisons, and mental health programs. The NYBG Certificate in Horticultural Therapy is known nationwide as marking the completion of important initial training toward professional registration with the American Horticultural Therapy Association.

**Phyllis D'Amico**, HTM, Program Coordinator

**Anne Meore**, HTR, Program Advisor

**QUESTIONS? CONTACT PROGRAM COORDINATOR PHYLLIS D'AMICO, HTM, AT [THRCOORDINATOR@NYBG.ORG](mailto:THRCOORDINATOR@NYBG.ORG)**

**INTRODUCTION TO HORTICULTURAL THERAPY**

Explore the plant-people relationships and scientific research that are the foundations of horticultural therapy. Learn about current programs that utilize horticultural therapy and the benefits of using plants and plant-related activities to reach cognitive, physical, psychological, and social goals for a variety of populations. Engage in activities for disability awareness and the development of therapeutic skills. Resources for professional development and the professional registration process are covered.

3 Saturdays, 9/14–9/28, 10 am–3:30 pm  
Anne Meore, HTR | NYBG | 201THR301D

3 Tuesdays, 10/29–11/12, 10 am–3:30 pm  
Anne Meore, HTR | NYBG | 202THR301A

2 Saturdays, 1/11 & 2/1, 10 am–3:30 pm, in Manhattan, and  
1 Saturday, 1/25, 10 am–3:30 pm, at NYBG  
Matthew Wichrowski, HTR | 203THR301B

3 Saturdays, 3/28–4/18 (no class 4/11),  
10 am–3:30 pm  
Anne Meore, HTR | NYBG | 203THR301C

\$375/\$415

**HORT THERAPY FOR OLDER ADULTS**

Older adults present an increasing need for therapeutic services. Learn about the physical, sensory, cognitive, psychological, and social aspects of aging and their implications for horticultural therapy programming. Explore how horticulture can be an important component in the various levels of geriatric care. 📌 Prerequisite: *Introduction to Horticultural Therapy*

3 Saturdays, 10/5–10/26 (no class 10/12),  
10 am–3:30 pm  
Abby Jaroslow, HTR | NYBG | 202THR401

\$419/\$459

**HORT THERAPY FOR PHYSICAL REHABILITATION**

Sharpen your clinical skills while learning how horticultural therapy is utilized in a physical rehabilitation setting. Explore the team treatment process and learn about the various conditions treated in this setting. Etiology, diagnosis, and psychosocial effects are covered. Learn the role of the horticultural therapist in the treatment process, including assessment, documentation, and development of goals and objectives. Review case studies and develop treatment plans. 📌 Prerequisite: *Introduction to Horticultural Therapy*

3 Saturdays, 11/2–11/16, 10 am–3:30 pm  
Matthew Wichrowski, HTR | NYBG | 202THR403

\$419/\$459

**HORT THERAPY FOR EXCEPTIONAL YOUTH**

Children and adolescents with special needs are the focus of this course. Gain an understanding of the causes and characteristics of various developmental, sensory, physical, behavioral, and learning disabilities. Learn to implement horticultural therapy for a wide variety of goals in programs for preschool-through high school-aged students. Explore the brain-based research and discover how horticultural therapy activities can aid in perceptual development and the learning process. 📌 Prerequisite: *Introduction to Horticultural Therapy*

3 Saturdays, 1/11–2/1 (no class 1/18), 10 am–3:30 pm  
Phyllis D'Amico, HTM | NYBG | 203THR402

\$419/\$459

**HORT THERAPY IN BEHAVIORAL HEALTH SETTINGS**

Horticultural therapy is practiced in a multitude of behavioral health settings, including hospitals, day treatment programs, group homes, and in private practice. Learn the diagnostic criteria for major psychiatric conditions, including anxiety, mood, psychotic, cognitive, and substance abuse disorders. Review actual case studies and create treatment plans utilizing horticulture activities for specific needs. 📌 Prerequisite: *Introduction to Horticultural Therapy*

4 Tuesdays, 1/28–2/18, 5:30–9:15 pm  
Erin Backus, HTR | NYBG | 203THR404

\$419/\$459

**COLLEGE CREDIT RECOMMENDATION**

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

The Horticultural Therapy Certificate Program is accredited by the American Horticultural Therapy Association (AHTA). Horticultural Therapy courses are eligible for college credit and can be applied toward voluntary Professional Registration through the AHTA. See page 59 for more information.

**ACTIVITIES ANALYSIS FOR HORT THERAPY**

For horticultural therapy to be most effective, activities must be structured so a client's progress can be clearly measured and assessed. Using a variety of activities, develop a needs assessment and activity plan, write specific goals with measurable objectives, and practice leadership skills needed to work with groups and individuals. Please bring lunch. **P** Prerequisite: *Horticultural Therapy for Physical Rehabilitation* (or approval of the Program Coordinator)

3 Saturdays, 2/22–3/7, 10 am–3:30 pm  
Abby Jaroslow, HTR | NYBG | 203THR407

\$419/\$459

**HORT 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 the collections and gardens at NYBG. Learn preventive approaches to safety in all horticultural therapy settings.

**P** Prerequisite: *Horticultural Therapy for Physical Rehabilitation* (or approval of the Program Coordinator)

3 Wednesdays, 4/8–4/22, 5:30–8:30 pm,  
and 1 Saturday, 4/25, 10 am–3:30 pm  
Phyllis D'Amico, HTM, and John Beirne, HTR  
NYBG | 204THR406

\$419/\$459

**GARDEN DESIGN FOR SPECIAL POPULATIONS**

Gardens can be catalysts for learning, health, inclusion, and therapy. Gain the knowledge, expertise, and tools to create, renovate, and evaluate both interior and exterior spaces to ensure effective gardens. Learn the latest research in health care garden design, common design principles, and necessary considerations and accommodations for target populations. **P** Prerequisite: *Horticultural Therapy for Physical Rehabilitation* (or approval of the Program Coordinator)

3 Wednesdays, 3/11–4/1 (no class 3/25), 6–9 pm,  
and 1 Saturday, 3/28, NYBG, 10 am–1 pm  
Nancy Minich, HTR, RLA | Manhattan | 203THR408

\$419/\$459

**HORT 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.

**P** Prerequisite: *Behavioral Health Settings* (or approval of the Program Coordinator)

3 Saturdays, 5/2–5/16, 10 am–3:30 pm  
Pat Czarnecki, HTR | NYBG | 204THR409

\$419/\$459



## SITE VISITS

**Tour some of the organizations practicing Horticultural Therapy in the New York area. Get a close-up look on their day-to-day practices.**

*Introduction to Horticultural Therapy* is the prerequisite for all site visits. Please bring lunch.

**THE HORT SOCIETY OF NEW YORK'S GREENHOUSE PROGRAM ON RIKERS ISLAND**

Hands-on healing and learning through horticulture takes place at HSNY's GreenHouse program on Rikers Island. Designed and built by inmates and their instructors, the garden features a native woodland, nursery, and vegetable and herb gardens. HSNY's horticultural therapists will give an overview of the program, and then you will spend the rest of the morning with student-inmates at the GreenHouse.

Thursday, 11/7, 6:30 am–1 pm  
Hilda Krus, HTR | Off site | 202THR537

\$135/\$149

**NYU LANGONE MEDICAL CENTER, THERAPEUTIC HORTICULTURE SERVICES, MANHATTAN**

The focus of this individualized intensive training is on physical medicine and rehabilitation—history, philosophy, and team functions. Participate in horticulture treatment sessions that deal with patient functioning, treatment goals, and precautions.

Tuesday, 10/22, 8:30 am–1 pm  
Matthew Wichrowski, HTR, and staff | Off site  
202THR525A

Tuesday, 12/3, 8:30 am–1 pm  
Matthew Wichrowski, HTR, and staff | Off site  
202THR525B

\$135/\$149

**CARDINAL COOKE HEALTH CENTER, MANHATTAN**

Visit a 720-bed chronic and long-term care facility that serves geriatric patients, patients with AIDS, Alzheimer's disease, dementia, Huntington's disease, and patients on short-term rehabilitation. Students will accompany the horticultural therapist on rounds to a variety of units. Lunch is available on-site. Travel directions are mailed with your confirmation letter.

Tuesday, 3/24, 10:30 am–2:30 pm  
Donna Arabian, HTR | Off site | 203THR528

\$135/\$149

# Landscape Design



©Stephen Doherty, *Tulips*, Oil

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 along with the skills and confidence to start your own business. And the Garden offers 250 inspiring acres of sustainable, functional landscapes for up-close, in-depth study. Take a single class for pleasure or pursue a professional Certificate in Landscape Design.

## THE CERTIFICATE PROGRAM

The NYBG Landscape Design Certificate Program prepares students for creative careers as landscape designers. Outstanding instructors who are working professionals cover every step of the design process, from landscape history to site analysis and design development.

Upon completion of the program, students 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
<b>TIER 1 – INTRODUCTORY CLASSES</b>			
Landscape Design History	LAN 301	24	46
Graphics I: Hand Rendering	LAN 311	24	47
Landscape Measurement	LAN 340	12	46
Landscape Plants: Fall Trees and Shrubs	HRT 331 <b>P</b>	12	39
Landscape Plants: Spring Trees and Shrubs**	HRT 334 <b>P</b>	12	—
Plants for Landscaping	HRT 358	16	37
<b>TIER 2</b>			
Landscape Design I: Site Analysis and Schematic Design	LAN 401 <b>P</b>	24	47
Landscape Design II: Design Development	LAN 402 <b>P</b>	24	47
Estimating	LAN 380 <b>P</b>	9	48
Graphics II: Hand Rendering	LAN 411 <b>P</b>	24	47
Site Materials and Details	LAN 422 <b>P</b>	24	47
<b>TIER 3</b>			
Grading and Drainage	LAN 428 <b>P</b>	24	48
Graphics III: SketchUp	LAN 417 <b>P</b>	24	47
Landscape Design III: Planting Design	LAN 403 <b>P</b>	24	47
Professional Practice for Landscape Designers	LAN 485 <b>P</b>	12	48
Landscape Design IV: Design and Construction	LAN 520 <b>P</b>	33	48
Portfolio and Presentation Skills	LAN 555 <b>P</b>	15	48
<b>TOTAL REQUIRED HOURS</b>		<b>349</b>	

\*Course hours do not include exam hours

\*\*Courses offered in the Spring–Summer Catalog

**P** Courses with a prerequisite before you can register

For professional organizations, see p. 59.

### 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.



The Program Coordinator, Susan Cohen, FASLA, RLA, is principal of Susan Cohen Landscape Architect in Greenwich, Connecticut. She lectures and writes on landscape topics, and coordinates NYBG's *Landscape Design Portfolios Lecture Series*, now in its 21st year. A graduate of Smith College, Susan earned a Certificate in Landscape Design at NYBG and a BS in Landscape Architecture from City College of New York. She is a member of the Garden's Board of Advisors and has designed several exhibition gardens for NYBG. Her recent book, *The Inspired Landscape*, is published by Timber Press.



**GET NYBG  
CERTIFIED**

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.

**Susan Cohen**, Program Coordinator  
**William Harris Einhorn**, Program Advisor

**QUESTIONS? CONTACT PROGRAM  
COORDINATOR SUSAN COHEN AT  
LANCOORDINATOR@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. This course is recommended for students with little or no background in design who want an overview of the practice or who are considering a Certificate.

3 Mondays, 9/16–10/7 (no class 9/30), 10 am–1 pm  
Daryl Beyers | NYBG | 201LAN100C

3 Tuesdays, 9/17–10/15 (no class 9/24 & 10/8),  
6:15–9:15 pm  
Kimberly Tryba | Manhattan | 201LAN100D

3 Mondays, 10/21–11/4, 10 am–1 pm  
Daryl Beyers | Manhattan | 202LAN100A

3 Saturdays, 11/2–11/23 (no class 11/16), 10 am–1 pm  
Kimberly Tryba | Manhattan | 202LAN100B

3 Saturdays, 2/22–3/7, 10 am–1 pm  
Kimberly Tryba | Manhattan | 203LAN100C

3 Thursdays, 3/5–3/19, 10 am–1 pm  
Sheri Forster | New Canaan Nature Center,  
New Canaan, Conn. | 203LAN100D

\$185/\$205

**CITY ROOF DESIGN**

Throughout the world, city roofs are becoming greener and used year-round, offering a significant opportunity for landscape designers. Learn the special requirements and challenges of roof gardens and discuss roof garden horticulture, maintenance, and technology, including the basics of design.

Monday, 9/16, 6:15–8:15 pm  
Hanna Packer | Manhattan | 201LAN175A

\$59/\$65

**DYNASCAPE: CAD FOR LANDSCAPE DESIGNERS**

Learn the various tools and applications of this software package for landscape designers. Topics include: basic skills for developing professional landscape plans, making base plans from surveys, techniques for quick estimates, and utilizing the online plant database. You must have basic computer skills and bring a PC laptop to class, not a Mac.

8 Fridays, 10/4–12/6 (no class 10/25 & 11/29),  
2–5 pm  
William Harris Einhorn, RLA | NYBG | 202LAN427A

8 Fridays, 1/17–3/6, 10 am–1 pm  
William Harris Einhorn, RLA | NYBG | 203LAN427B

\$555/\$609 (There is an additional software fee of \$125. Special cancellation policy applies.)

**NEW! UNTERMYER: A CONTEMPORARY PERSIAN GARDEN**

Intended to make paradise manifest on Earth, Persian gardens are known for their masterful use of geometry and water. Explore how this garden design style evolved from antiquity through the 19th century with Stephen F. Byrns, founder of the Untermyer Gardens Conservancy. He will discuss the architecture and spatial development of the gardens, as well as their intended spiritual and symbolic meaning. Then, the class will visit the newly restored Untermyer Gardens in Yonkers for a guided tour that highlights both history and horticulture.

Friday, 9/27, 10 am–3:30 pm  
Steve F. Byrns and Batya Gorin | NYBG & Untermyer  
Gardens | 201LAN912

\$175/\$195

**NEW! DESIGN YOUR TOWNHOUSE OR TERRACE GARDEN**

Want to transform your personal urban space into a green oasis? This class will provide you with the inspiration and the framework to tackle it. Liz Pulver, an award-winning landscape architect specializing in small, city-sized spaces, will help you analyze your space and develop a design concept to fit your vision. You'll review the planning principles and budgeting parameters involved, while creating an implementation strategy. Learn what it takes to make your dream a reality, either on your own or with the help of others.

4 Wednesdays, 10/30–11/20, 6–9 pm  
Liz Pulver | Manhattan | 202LAN229

\$325/\$365

**NATURALISTIC LANDSCAPE DESIGN**

Conventional structured landscapes are giving way to looser, more naturalistic designs based on the existing landscape's particular potential. Using images of his own six-acre garden, which—like horticulture itself—strikes a balance between art and science, Duncan Brine, a principal landscape designer at Garden Large, presents an approach that elicits responses from the site rather than imitating or imposing a traditional concept or style.

Friday, 2/7, 10 am–12 pm  
Duncan Brine | NYBG | 203LAN226

\$59/\$65

**LANDSCAPE DESIGN HISTORY**

This course is also required for the Horticulture Certificate TRACK 4.

Study theories and principles that have shaped the design of landscapes from antiquity to the present. Explore Eastern and Western garden traditions. Survey all types of gardens and landscapes, including corporate and public spaces, through visual presentations, assigned readings, projects, and classroom discussion. Landscape designs will be considered in the context of the times and societies in which they were created.

9 Tuesdays, 9/17–11/19 (no class 10/8),  
6:15–9:15 pm  
Mark Bunnell, RLA | Manhattan | 201LAN301A

9 Wednesdays, 9/18–11/20 (no class 10/9),  
10 am–1 pm  
Paula Sarathy | NYBG | 201LAN301B

9 Tuesdays, 1/7–3/3 (no class 1/20, 2/17,  
& 3/16), 6:15–9:15 pm  
Paula Sarathy | NYBG | 203LAN301C

9 Mondays, 1/13–3/30 (no class 1/20, 2/17,  
& 3/16), 6:15–9:15 pm  
Mark Bunnell, RLA | Manhattan | 203LAN301D

8 Tuesdays, 2/4–3/24, 9:30 am–12:30 pm  
Marta McDowell | NYBG | 203LAN301S

9 Tuesdays, 3/31–5/26 (no class 4/11),  
6:15–9:15 pm  
Mark Bunnell, RLA | Manhattan | 203LAN301E

8 Fridays, 3/20–5/8, 10 am–1 pm  
Caitlin Merritt | NYBG | 203LAN301F

\$595/\$655 *Certificate Requirement*

**LANDSCAPE MEASUREMENT**

Precise field measurement is the crucial first step in landscape design. This course includes a two-part project. First, learn to create a site plan using tape measures, baseline, and offset measurement techniques. Next, use builders' levels to collect spot elevations across the site, converting them to contours to incorporate elevation into the site plan and complete the project. Students will have mapped a 7,000 square foot site and produced a completed topographic drawing to scale. Dress for the weather.

4 Saturdays, 9/14–10/5, (Rain date 10/6), 10 am–1 pm  
Wayne Cahilly | NYBG | 201LAN340C

4 Saturdays, 4/4–5/2 (no class 4/11),  
(Rain date 5/16), 10 am–1 pm  
Sarah Hettinger | NYBG | 204LAN340A

\$295/\$329 *Certificate Requirement*

**GRAPHICS I: HAND RENDERING**

This course is also required for the Horticulture Certificate TRACK 4.

Graphics are essential in developing and communicating your design ideas. Practice various graphic techniques and learn how to organize and render landscape plans on paper for optimal presentation to clients. Work with a range of drawing materials and drafting equipment. Homework is required.

8 Thursdays, 10/3–12/12 (no class 11/7, 11/14, & 11/28), 6:15–9:15 pm  
Elizabeth Poccia | Manhattan | 202LAN311D

8 Thursdays, 10/3–11/21, 2–5 pm  
Gustavo Capparelli | NYBG | 202LAN311A

8 Mondays, 10/28–12/16, 10 am–1 pm  
William Harris Einhorn, RLA | NYBG | 202LAN311B

8 Tuesdays, 1/7–2/25, 6:15–9:15 pm  
Elizabeth Poccia | Manhattan | 203LAN311C

8 Tuesdays, 1/7–2/25, 2–5 pm  
Gustavo Capparelli | NYBG | 203LAN311D

8 Thursdays, 1/9–2/27, 10 am–1 pm  
William Harris Einhorn, RLA | NYBG | 203LAN311E

\$595/\$655 Certificate Requirement

**LANDSCAPE DESIGN I: SITE ANALYSIS AND SCHEMATIC DESIGN**

Turning a vision into a plan is the designer's first challenge. Learn how to analyze existing landscapes and formulate the programmatic and functional requirements of a design project. Translate these into schematic design solutions. Take part in class discussions and critiques, and present projects. This is the first of four successive studio courses. Extensive out-of-class design homework is required. **P** Prerequisites: *Landscape Design History and Graphics I*

7 Wednesdays, 12/4–2/5, (no class 12/18, 12/25 & 1/1), & 1 Monday, 12/9, 10 am–1 pm  
Daryl Beyers | NYBG | 202LAN401S

8 Mondays, 1/6–3/9 (no class 1/20 & 2/17), 6:15–9:15 pm  
TBA | Manhattan | 203LAN401A

\$575/\$635 Certificate Requirement

**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. **P** Prerequisite: *Graphics I*

8 Tuesdays, 9/24–11/19 (no class 10/8), 6:15–9:15 pm  
William Harris Einhorn, RLA | NYBG | 201LAN411C

8 Tuesdays, 9/24–11/19 (no class 10/8), 10 am–1 pm  
Gustavo Capparelli | NYBG | 201LAN411D

8 Mondays, 1/6–3/9 (no class 1/20 & 2/17), 10 am–1 pm  
William Harris Einhorn, RLA | NYBG | 203LAN411A

8 Thursdays, 1/16–3/5, 6:15–9:15 pm  
Elizabeth Poccia | Manhattan | 203LAN411B

\$595/\$655 Certificate Requirement

**LANDSCAPE DESIGN II: DESIGN DEVELOPMENT**

Apply basic design concepts to site-specific problems, focusing on the process of design development. Start with a conceptual design, then progress through the schematic phase, leading 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*

8 Wednesdays, 9/11–11/13 (no class 9/25 & 10/9), 10 am–1 pm  
Leslie Needham | NYBG | 201LAN402A

8 Wednesdays, 3/11–4/29, 6:15–9:15 pm  
David McConnell | NYBG | 203LAN402B

\$575/\$635 Certificate Requirement

**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 II*

8 Mondays, 9/16–11/25 (no class 9/30, 10/14, 11/11), 6:15–9:15 pm  
Gustavo Capparelli | NYBG | 201LAN422A

8 Mondays, 3/16–5/4, 10 am–1 pm  
William Harris Einhorn, RLA | NYBG | 203LAN422B

\$575/\$635 Certificate Requirement

**GRAPHICS III: SketchUp**

Build and expand upon your graphic presentation skills to create professional presentations to clients. Trimble SketchUp, a 3D sketching software program, is the focus of this advanced graphics class. Laptop computers (PC or Mac) with SketchUp are required.

**P** Prerequisite: *Graphics II*

8 Fridays, 9/13–11/1, 10 am–1 pm  
William Harris Einhorn, RLA | NYBG | 201LAN417

8 Wednesdays, 1/8–2/26, 10 am–1 pm  
William Harris Einhorn, RLA | NYBG | 203LAN417A

8 Thursdays, 3/19–5/7, 6:15–9:15 pm  
Elizabeth Poccia | Manhattan | 203LAN417B

\$595/\$655 Certificate Requirement

**LANDSCAPE DESIGN III: PLANTING DESIGN**

Through a series of design assignments, learn how to prepare planting plans for a variety of projects. Explore the significance of site conditions as well as plant form, texture, color, and ecological associations. Learn to develop plans that are practical, appropriate, and aesthetically satisfying.

**P** Prerequisites: *Landscape Design II, Graphics III, and Plants for Landscaping*. Recommended: *Landscape Plants: Fall Trees and Shrubs and Landscape Plants: Spring Trees and Shrubs*

8 Thursdays, 9/12–10/31, 10 am–1 pm  
Alexis Gagne | NYBG | 201LAN403B

8 Wednesdays, 1/8–2/26, 2–5 pm  
Alexis Gagne | NYBG | 203LAN403A

\$575/\$635 Certificate Requirement



Rooftop Garden, Ministry of Education and Public Health, Rio de Janeiro, ©Leonardo Finotti

## Roberto Burle Marx Innovation and Activism

Three thought-provoking scholars explore unique aspects of Brazilian modernist Roberto Burle Marx—the visionary landscape architect and conservationist whose bold aesthetic fused nature, culture, history, and art into landscapes he hoped could change cities and society.

After the morning session visit NYBG's major exhibition, *Brazilian Modern: The Living Art of Roberto Burle Marx*.

**Bruno Carvalho**, Professor, Department of Urban Planning and Design, Harvard University

**Gareth Doherty**, Assistant Professor and Director, Master of Landscape Architecture Program, Harvard University

**Luisa Valle**, Doctoral Candidate in Art History, City University of New York

Friday, 9/13, 11 am–12:30 pm  
NYBG | 201LAN905 | \$25/\$29

Presented by The Humanities Institute  
Supported by The Andrew W. Mellon Foundation

## Ecological Design Retreat with Edwina von Gal



©Alan Pollak-Morris

Discover the emerging field of Land Partnering with landscape designer and environmentalist Edwina von Gal and horticulturist & chemical-free landscape contractor Tony Piazza at Edwina's home and "laboratory" garden. See how they manage the property as an ecosystem rather than an isolated landscape. The visit will cover how to maintain a healthy soil biome, control pests without chemicals, manage biomass, and select the best native, deer-resistant plants for year-round beauty and ecosystem services (for birds, butterflies, and more!). An organic, vegetarian optional, lunch will be served on the deck.

Saturday, 11/2 (rain date 11/3), 11 am–4:30 pm  
Edwina von Gal | Marsh House | 202LAN904

\$145/\$159

### GRADING & DRAINAGE

Creating beautiful and sustainable outdoor spaces requires an understanding of the principles of grading and drainage. Through classroom discussion, fieldwork and homework students will learn to identify landforms and watersheds, calculate slopes, and manipulate contours with the purpose of creating garden rooms and controlling water flow. An emphasis will be placed on how to communicate design ideas to contractors and how to evaluate the opportunities and constraints of a project site.

**P** Prerequisites: *Landscape Measurement, Landscape Design I, and Graphics II*

8 Fridays, 10/18–12/13 (no class 11/29), 10 am–1 pm  
Alice Eckerson | NYBG | 202LAN428A

8 Wednesdays, 3/4–4/22, 10 am–1 pm  
Alice Eckerson | NYBG | 203LAN428B

\$575/\$635 *Certificate Requirement*

### PROFESSIONAL PRACTICE FOR LANDSCAPE DESIGNERS

Before you launch your own landscape design and installation practice, there are many business aspects you need to consider. Topics include attracting clients, preparing proposals, pricing, purchasing and installing plants, and strategies for success. **P** Prerequisite: *Landscape Design III*

4 Wednesdays, 10/2–10/30 (no class 10/9),  
5:15–8:15 pm

Jessica Zavaglia | NYBG | 202LAN485

4 Thursdays, 2/27–3/19, 10 am–1 pm  
Jessica Zavaglia | NYBG | 203LAN485B

\$295/\$325 *Certificate Requirement*

### ESTIMATING

Learn the critical components for compiling accurate estimates for landscape projects, including materials, labor, overhead, and contingencies. Learn how to use estimates to stay profitable and compete successfully in today's business climate. **P** Prerequisite: *Landscape Design II*

4 Mondays, 1/6–2/3 (no class 1/20), 10 am–1 pm  
Bruce G. Eckerson, PLA | NYBG | 203LAN380A

4 Mondays, 1/6–2/3 (no class 1/20), 2–5 pm  
Bruce G. Eckerson, PLA | NYBG | 203LAN380B

\$219/\$239 *Certificate Requirement*

### LANDSCAPE DESIGN IV: DESIGN AND CONSTRUCTION

Draw upon all of the skills you've developed in the Landscape Design program to create a residential project from start to finish, combining design with construction principles. Emphasis is on construction drawings, documents, and specifications, as well as estimating. **P** Prerequisites: *Landscape Design III, Grading, and Site Materials and Details*

11 Wednesdays, 3/11–5/20, 4:30–7:30 pm  
Liz Pulver | NYBG | 203LAN520

\$829/\$909 *Certificate Requirement*

### PORTFOLIO AND PRESENTATION SKILLS

Create visually compelling portfolios to present to potential clients and potential employers. Learn how to develop professional documentation for a variety of audiences through in-class design charrettes and individualized projects. Both print and electronic media presentations will be discussed. **P** Prerequisite: *Landscape Design III*

5 Tuesdays, 3/10–4/7, 6:15–9:15 pm  
Adam Moliński | NYBG | 203LAN555

\$379/\$415 *Certificate Requirement*

Exam on last class date.

## Digital Tools for Professionals

### NEW! SOCIAL MEDIA STRATEGIES

Learn how to use Facebook, Instagram, Twitter, and Pinterest to showcase your work. Define your goals for using social media as a marketing tool, and create a strategy to achieve those goals. Discover tips for attracting and engaging followers. Basic smartphone fluency is recommended. If possible, please bring a smartphone with the aforementioned apps pre-downloaded.

Saturday, 1/11, 10 am–3:30 pm  
Candace Thompson | NYBG | 203BIL394

\$115/\$129

### NEW! BASIC WEBSITE DESIGN

Having a professional online presence is essential to getting the word out about your work. In this hands-on class, you will build a simple website (no coding required!) to showcase your portfolio using Wix.com, a free and easy-to-use platform. We will also showcase free online photo-editing tools. Basic familiarity with internet navigation is expected. Bring a laptop and 10–15 digital images of you, your studio, and your work to use in building your new site.

2 Saturdays, 1/25 & 2/1, 11 am–2:30 pm  
Candace Thompson | NYBG | 203BIL395

\$155/\$169

### NEW! INTRO TO MOBILE DESIGN

iOS apps can improve your ability to visually convey your design ideas to clients. An Apple product whiz turned landscape designer, Cat Morris provides an overview of tools you can use, as well as how to integrate them into your existing workflow, such as Adobe Capture (turn photos into assets you can use in your landscape plans) and Morpholio Board (assemble mood boards). Bring your iPhone or iPad to experiment!

Saturday, 2/8, 10 am–2 pm  
Cat Morris | NYBG | 203LAN222

\$95/\$105

### NEW! CONCEPTS: DIGITAL SKETCHING

Explore the Concepts app to create a 2-D landscape plan on your iPad or Surface Device. Learn to sketch directly on the screen, import and modify existing assets, and then produce a precise drawing to scale. We'll also cover how to export your plan into a number of hi-resolution formats that can be used in other applications such as AutoCAD, Photoshop, or Adobe Illustrator. Build your digital design confidence while exploring this powerful tool.

2 Saturdays, 2/22 & 2/29, 10 am–2 pm  
Cat Morris | NYBG | 203LAN223

\$155/\$169



## Landscape Design Students & Alumni Series

Come hear award-winning and nationally renowned professionals share their expertise. These popular afternoon lectures coincide with monthly morning meetings of the Landscape Design Students and Alumni Association. All are welcome to register.

### TUESDAYS, 1–3 PM, AFTER LDSA MEETINGS

Registration fee for each class: \$29/\$35. Register for three or more over the phone (718.817.8747) and receive a 10% discount.

For more information about the LDSA, see p. 59.



Continuing Education Units are available.

### A GARDENING LIFE

“Gardens are never finished and most of the pleasure is in their creation rather than their completion.” So says James Alexander-Sinclair, one of the UK’s foremost garden designers and one who relishes collaborating with his clients. He will take us through some of his favorite gardens—both private and public—sharing the stories behind their creation and the various solutions to their unique problems. Hills, tiny courtyards, healing gardens, rolling acres, flower shows, and kitchen gardens: all horticultural life is here.

The Chairman of the Royal Horticultural Society Gardens Committee, **James Alexander-Sinclair** has designed gardens from London to Moscow. He is an award-winning garden writer, has judged at flower shows across the world, presented television programs, and has been part of the BBC Chelsea Flower Show coverage for ages.

Tuesday, 10/22, 1–3 pm | NYBG | 202LAN265A

### THE ART OF PHOTOGRAPHING LANDSCAPES

Ngoc Minh Ngo’s images of gardens and landscapes—from Lowther Castle in England to the wildflowers of Morocco—go “beyond mere beauty and into the sublime.” With illustrations of her own work, she will demonstrate how she developed her poetic vision through literature, paintings, film, and photography. Get inspired to look closely and capture the magic of the landscapes you create.

**Ngoc Minh Ngo** is a celebrated photographer of gardens and interiors whose work has been featured in *Vogue*, *T Magazine*, *Architectural Digest*, and *House & Garden UK*. She is the author of two books—*Bringing Nature Home* and *In Bloom*—with two more due out in fall 2019, *Eden Revisited: A Garden in Northern Morocco* and *Nature into Art: The Gardens of Wave Hill*.

Tuesday, 11/19, 1–3 pm | NYBG | 202LAN265B

### FARMING IN THE CONCRETE JUNGLE

Co-founder of Brooklyn Grange, the world’s largest rooftop soil farm, Ben Flanner shares his insights about the future of urban agriculture and what it takes to run a commercial farm on manufactured land. Located on three roofs in New York City, the farm grows over 80,000 pounds of organic produce per year, serves as an event space and education center, and offers green roof consulting and design/build services.

An industrial engineer with experience in management consulting, **Ben Flanner** is widely considered to be a groundbreaking pioneer for adapting existing green roof technology for intensive vegetable cultivation. Prior to starting Brooklyn Grange, he co-founded Eagle Street Rooftop farm and lectures regularly about urban agriculture around the world.

Tuesday, 12/17, 1–3 pm | NYBG | 202LAN265C

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

### A GATHERING OF STONES

Stone underlies all earthly life. It is grist for loam and the bedrock of megacities. But because it’s so ubiquitous, it tends to disappear in plain sight. Dan Snow’s work brings stone into sharp focus by elevating this humble, natural material to new heights. His hand-crafted, site-specific dry stone installations fuse environment and art, offering new perspectives on both. Dan’s lushly illustrated talk will trace his long career in partnership with Earth’s most basic elements.

An outdoor craftsman and art maker, **Dan Snow** creates practical landscape structures and playful environmental artworks in dry stone. A life-long Vermonter, Dan has traveled widely for more than four decades producing public and private site-specific installations.

Tuesday, 1/21, 1–3 pm | NYBG | 203LAN265D

### PLANTS FOR RECLAIMED LAND

How do you decide which plant species work best on a tough site? Which should be removed, which contained, which cultivated? Drawing on her experience turning once-feral urban landscapes such as Governors Island and the High Line into thriving natural ecosystems, plantsperson Andi Pettis will help you select plants that work best on challenging land.

**Andi Pettis** is the Director of Horticulture at Governors Island, a newly transformed 172-acre island in the heart of New York Harbor. Previously, she spent 10 years at the High Line where she led a team of gardeners managing a unique and sophisticated urban landscape. Her horticulture career spans nearly two decades and includes private and public gardening and parks management.

Tuesday, 2/18, 1–3 pm | NYBG | 203LAN265E

### FEDERAL TWIST: A DARING DANCE WITH NATURE

James Golden set out to create a wet prairie in western Jersey. Faced with heavy clay, standing water, and a derelict woodland setting, he didn’t mulch or amend the soil or spray herbicide. Instead, he planted right into the existing weedy matrix, eschewing traditional techniques of managing invasives. Now, Federal Twist is an acclaimed garden—a lush riot of hardy grasses and perennials given structure by a collection of tall, architectural plants. Golden will share unconventional methods that Thomas Rainer and Claudia West call “a daring dance with nature.”

**James Golden**’s Federal Twist has been profiled in publications such as *Gardens Illustrated*, *The New York Times*, Rainer and West’s *Planting in a Post-Wild World*, Claire Takacs’s *Dreamscapes*, and Christopher Wood’s *Gardenlust*. A self-taught gardener, Golden has a Master’s Degree in modern poetry and worked as a writer for most of his career.

Tuesday, 3/17, 1–3 pm | NYBG | 203LAN265F

# Photography

*Experiment with light, composition, and motion or familiarize yourself with new technology to up your photography game!*



©Veronica Lawlor, *Peony*, Pastel on Mi-Teintes paper

## CLOSE-UP & MACRO WORKSHOP

Learn to create intimate and detailed portraits of flowers using various lenses, proper depth of field, filters, and the best framing techniques. Equipment, including zoom telephotos, close-up diopter filters, extension tubes, teleconverters, dedicated macro lenses, and wide angle close-ups will be demonstrated in the classroom, followed by practice using your own equipment. Images will be projected on screen for discussion and review.

Wednesday, 10/2, 9 am–3 pm  
Jeffrey Falk | NYBG | 202GWP928

\$109/\$119

## CAPTURING MOTION

Incorporating movement in a photograph can bring an image to life, emphasizing a shower of falling leaves or a bird's flight. You'll experiment with leaving your camera shutter open longer to capture motion, and learn how the amount of light in your environment affects your decision. We'll look at a variety of images for inspiration, before going into the Thain Family Forest to capture the movement of our waterfall. Please bring a tripod and a camera that allows you to manually adjust your shutter speed. We'll also discuss apps you can use on your smartphone for this.

Sunday, 10/27 (rain date 11/3), 11 am–2 pm  
Bryan Whitney | NYBG | 202GWP214

\$59/\$65

## PHOTOGRAPHING BIRDS

Develop a variety of techniques that will help you create stunning photos of the birds you spot. Photographer Clay Taylor will show you how the correct light, vantage point, and gear will help you produce shots that are most true to life. We'll also cover best practices for composition, including when to fill your frame with the bird or when to include the background to complete a scene.

Saturday, 10/5, 10 am–2 pm  
Clay Taylor | NYBG | 202GWP279

\$85/\$95

## NEW! PROP STYLING WITH BOTANICALS

Professional prop stylist Robin Zachary shares her insights on styling photos using botanicals. She'll also show you how to curate a variety of tabletop settings, including modern, vintage, and rustic. Some backdrops and props will be provided, but feel free to bring your own, along with your camera or smartphone so you can experiment. No professional experience necessary.

Saturday, 10/19, 11 am–2 pm  
Robin Zachary | Manhattan | 202FDN312

\$95/\$105

**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.

Saturday, 10/26, 3–6 pm (rain date Saturday, 11/9, 2–5 pm),  
David Samuel Stern | NYBG | 202GWP238

\$59/\$65

**GOODBYE DIGITAL CAMERA...HELLO IPHONE!**

Learn practical techniques and tips for using the iPhone camera. Discover the best apps for photo taking, special effects, editing, post-processing, and more. The best way to organize and share your photos and videos via email, e-cards, and social media will be demonstrated. Bring your charged iPhone, Apple ID, and its password.

Tuesday, 10/29, 10 am–1 pm  
Donald Gambino | NYBG | 202GWP151A

Saturday, 2/8, 10 am–1 pm  
Donald Gambino | NYBG | 203GWP151B

Saturday, 2/8, 2–5 pm  
Donald Gambino | NYBG | 203GWP151C

\$59/\$65

**LEARNING TO SEE: BASIC COMPOSITION**

After decades as a sought-after fashion photographer, Douglas Dubler knows what makes a compelling image. Using his own photographs and those of the masters, he'll demonstrate how to create powerful images with light, shape, and form—and without fancy equipment. Walk away from this session with a clear focus on how to frame the world around you.

Wednesday, 11/6, 1–4:30 pm  
Douglas Dubler | NYBG | 202GWP224A

Wednesday, 2/26, 1–4:30 pm  
Douglas Dubler | Manhattan | 203GWP224B

\$59/\$65

**THE ART OF INTUITIVE PHOTOGRAPHY**

Award-winning photographer Mindy Veissid emphasizes an intuitive approach to taking pictures, one where open awareness precedes technical perfection and aims to cultivate photography's meditative potential. You will practice being more mindful of your surroundings, attuned to the subjects that draw your attention and learn to use your senses to guide you to the most meaningful images. All levels and camera types are welcome.

Saturday, 11/16, 11 am–2 pm  
Mindy Veissid | NYBG | 202GWP280

\$59/\$65

**STACKED IMAGE WORKSHOP**

Stacked image photography allows you to create images of extraordinary depth, sharpness, and detail. In this hands-on workshop using your own digital camera (manual focus required), you'll take a series of photos of the same subject, focusing each shot on a different area. You will then use a special software to combine these photos into one final breathtaking image. You will walk away from this class with all the techniques, equipment, and software tips you need to continue refining this process at home. Please bring your laptop to class, with the free 30-day trial software specified in your email confirmation already downloaded.

Thursday, 1/23, 10 am–4 pm  
Jeffrey Falk | NYBG | 203GWP213

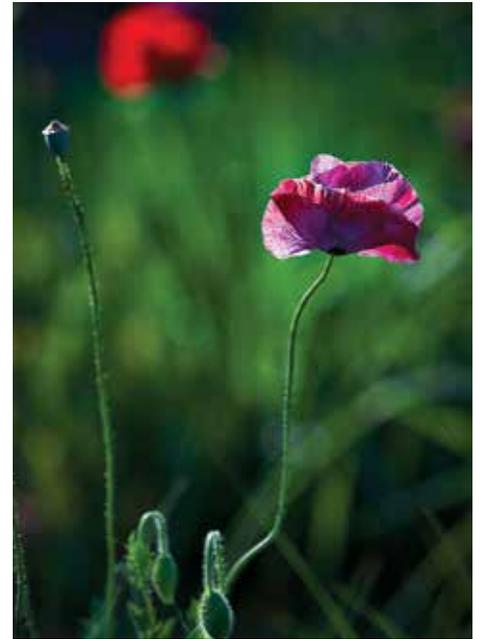
\$109/\$119

**INDOOR LIGHTING BASICS**

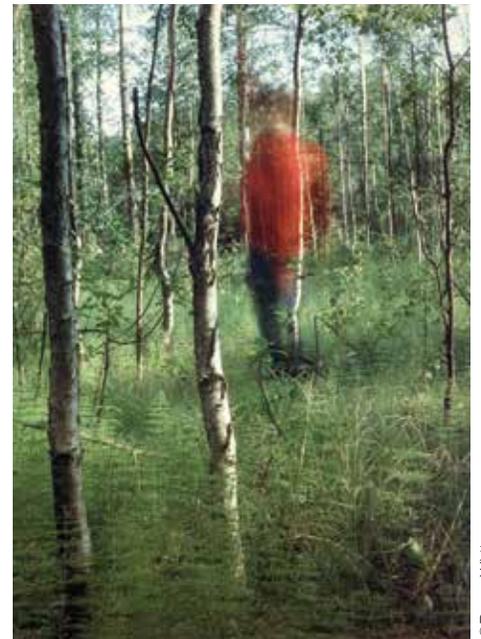
Dive in to using low-budget table-top lighting equipment and techniques to make compelling photos of botanical subjects and floral arrangements. Photographer David Samuel Stern will discuss the basic principles of still-life lighting design and walk you through manual camera controls to achieve optimal effect, and get the foundation on which to craft photos as striking as the old Dutch Masters paintings! Please bring a camera with manual controls and a tripod.

Saturday, 2/22, 1–5:30 pm  
David Samuel Stern | NYBG | 203GWP228

\$85/\$95



Learning to See: Basic Composition



Capturing Motion

**Special Photographers' Hours**

For serious photographers only, this is a rare opportunity to capture the exquisite beauty of NYBG's exhibitions without casual visitors present. Bring your tripod (the only time we'll allow them in the Conservatory!), since you'll be shooting with available light. Please minimize gear—no backdrops or screens.

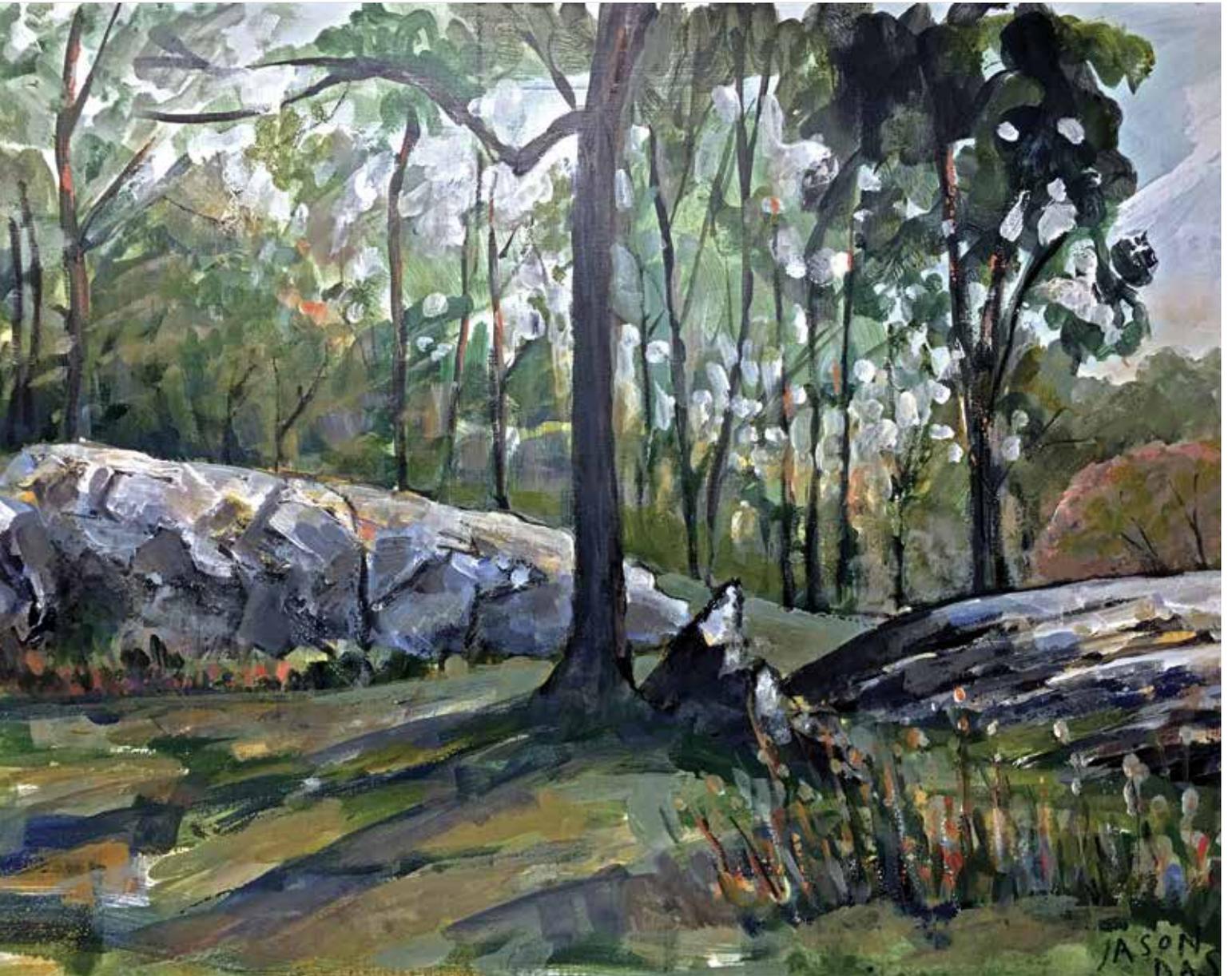
**NEW! HOLIDAY TRAIN SHOW® PHOTOGRAPHERS' HOURS**

Tuesday, 12/10, 8:30–10 am | 202GWP231 | \$49/\$55

**THE ORCHID SHOW: PHOTOGRAPHERS' HOURS**

Friday, 3/6, 8:30–10 am | 203GWP229 | \$49/\$55

# Urban Naturalist



©Jason Das, *Outcrops Afternoon*, Acrylic and Graphite

In this teeming metropolis we call home, nature is all around us whether we pause to carefully observe it or not. Amaranth springs through the cracks in our sidewalks; migrating warblers rest in our parks; horseshoe crabs scuttle onto our beaches to breed. As a NYBG Urban Naturalist, you will have a unique opportunity to explore these diverse habitats while discovering the keys that unlock their many secrets.

## THE CERTIFICATE PROGRAM

The NYBG Urban Naturalist Certificate Program equips you with the observation, identification, and documentation skills you need to become an effective environmental steward. Using NYBG grounds and select New York 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.

## FIELD STUDY PROJECT

In order to receive a Certificate, you must complete an in-depth study of a natural site of your choosing based on observations made there over many months that includes 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 in the Registration Office.

## CERTIFICATE REQUIREMENTS

Course	Code	Hours	Page
Introduction to Natural History	NAT 300	12	54
Natural History of Birds	NAT 321	12	54
Natural History of Insects**	NAT 322	9	—
Urban Ecology Field Study	NAT 323 <b>P</b>	9	55
<i>Two of the four Native Flora courses:</i>		24	—
Native Flora in Autumn	BOT 331		54
Native Flora in Winter	BOT 332		55
Native Flora in Spring**	BOT 333		—
Native Flora in Summer**	BOT 334		—
<i>Elective Courses (See current electives below)</i>		30	
<b>Total Required Hours</b>		96	

## ELECTIVES

The following Naturalist courses—along with all Botany electives listed on pages 13—count toward the 30 required elective hours.

Course	Code	Hours	Page
Photographing Birds	GWP 279	3	54
Night Callers: Bronx Bats	NAT 329	3	54
Lead a Nature Walk	NAT 324	3	54
Introduction to Urban Ecology	NAT 338	4	55
Urban Flora: Growing Between the Cracks	NAT 332	6	55

\*\*Courses offered in the Spring–Summer Catalog

**P** Courses with a prerequisite before you can register



The Program Coordinator, a dedicated naturalist for over 40 years, Nancy Slowik is the former director of Greenbrook Sanctuary, co-founder of the Greenbelt Native Plant Center, and author of two books on local flora. Currently, she consults with Restore Native Plants to provide guidance for a native plant propagation facility and restoration facility in Ramapo Mountain Park Preserve.

**QUESTIONS? CONTACT PROGRAM COORDINATOR NANCY SLOWIK AT [NATCOORDINATOR@NYBG.ORG](mailto:NATCOORDINATOR@NYBG.ORG)**

*“Being able to study with the caliber of instructors in Adult Education is a rare opportunity; the quality of the education I have received is unmatched. Further, the frequent inclusion of new courses ensures that there will always be fascinating offerings to lure me back into these classrooms!”*

—JOAN BASILE, 2019 Graduate



## *Focus on Nature this Fall*

Revel in the colors and sounds of autumn and complete the first three classes in our Urban Naturalist Program in four weeks.

**INTRO TO NATURAL HISTORY | NATIVE FLORA IN AUTUMN  
NATURAL HISTORY OF BIRDS**

Tuesdays, Wednesdays, & Thursdays, 10/10–11/6, 10 am–1 pm | NYBG | 202NAT318

\$795/\$875



©Lisa Whitmer

### NATIVE FLORA IN AUTUMN

Autumn is one of the most spectacular times to learn more about the native flora of the Northeast. Goldenrods and asters take center stage at this time of year, but can be difficult to identify. Equipped with a 10X power hand lens, you'll learn to use a plant key to help you identify these plants on the Garden grounds, as well as other wildflowers, shrubs, and trees.

4 Saturdays, 9/28–10/26 (no class 10/12),  
10 am–1 pm  
Clara Holmes | NYBG | 201BOT331A

4 Thursdays, 10/10–10/31, 10 am–1 pm  
Nancy Slowik | NYBG | 202BOT331B

\$295/\$325 *Certificate Requirement*

### NATURAL HISTORY OF BIRDS

With its wide variety of habitats and its position on the Atlantic Flyway, NYC is a bird-lover's paradise. Over 300 distinct resident or migratory species live here or pass through, including many nesting species such as Peregrine Falcons, Red-tailed Hawks, Yellow Warblers, and Baltimore Orioles. You will practice observing distinctive feather patterns, beak and body shapes, and evaluating songs and behaviors to improve your ability to identify species in the field and to use field guides effectively. We'll emphasize the role individual birds play in our ecosystem, while enjoying the unique nature of autumnal birding!

4 Mondays, 10/7–11/4 (no class 10/14)  
(rain date 11/18), 10 am–1 pm  
Ken Chaya | Manhattan & Central Park | 202NAT321B

4 Wednesdays, 10/16–11/6 (rain date 11/13),  
10 am–1 pm  
Ken Chaya | NYBG & Central Park | 202NAT321A

\$295/\$325 *Certificate Requirement*

### INTRODUCTION TO NATURAL HISTORY

Naturalists are keen observers of the world around them and have played an integral role in the evolution of scientific thought. Now you can be one too! Learn how to identify plants and animals using a 10x hand lens, dichotomous keys, and field guides. We'll discuss ecological processes and how they are impacted by the urban environment. Significant time will be spent outside on Garden grounds and Pelham Bay Park. Novices and seasoned nature-lovers alike are welcome!

4 Tuesdays, 10/15–11/5 (rain date 11/12),  
10 am–1 pm  
Karla Risdon-Nugent | NYBG & Pelham Bay Park  
202NAT300B

\$295/\$325 *Certificate Requirement*

### AUTUMN MUSHROOMS

Here in NYC, fall is the best time to hunt for edible fungi, including honey, oyster, and hen-of-the woods mushrooms. Paul Sadowski, 25-year veteran of the New York Mycological Society, will show you how to identify many species and their look-alikes, where to find them, and how to cook or preserve them. We'll embark on mushroom hunts together on Garden grounds, as well as in NYC Parks as the season permits.

2 Tuesdays, 10/1 & 10/8, 10 am–1 pm  
Paul Sadowski | Manhattan | 202BOT368A

2 Fridays, 10/18 & 10/25, 10 am–1 pm  
Paul Sadowski | NYBG | 202BOT368B

\$145/\$159 *Certificate Elective*

### NEW! NIGHT CALLERS: BRONX BATS

The fascinating lives of bats are revealed courtesy of J. Alan Clark, Ph.D., co-author of *Bats in the Bronx*, a recent study of five local bat species. After a brief lecture, we will venture onto NYBG's grounds using handheld equipment to locate and identify bats through their ultrasonic calls. This equipment creates a picture of each bat's call, and we hope to "see" several species, including Eastern Red bats in August and Silver-Haired bats in October.

Wednesday, 10/9, 6:30–8:30 pm  
J. Alan Clark, Ph.D. | NYBG | 202NAT329

\$85/\$95 *Certificate Elective*

### PHOTOGRAPHING BIRDS

Discover a variety of techniques that will help you create stunning photos of the birds you spot. Photographer Clay Taylor will discuss what type of light, vantage point, and gear will help you produce shots that are most true to life. We'll also discuss best practices for composition, including when to fill your frame with the bird or when to include the background to paint a scene.

Saturday, 10/5, 10 am–2 pm  
Clay Taylor | NYBG | 202GWP279

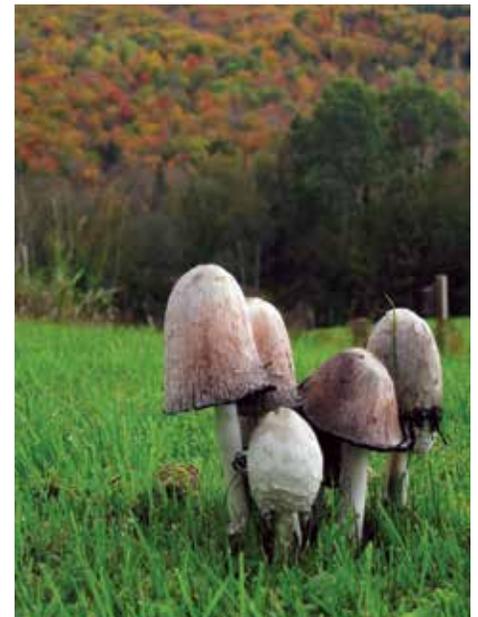
\$85/\$95 *Certificate Elective*

### NEW! LEAD A NATURE WALK

Share your passion for nature by learning to lead interactive walks that engage diverse audiences. We'll discuss how to break down complex ecological concepts into digestible pieces, as well as how to encourage participation while keeping your group focused. Build your confidence by practicing your skills in a supportive environment.

2 Sundays, 11/3 & 11/17, 1–4 pm  
Jamie Boyer, Ph.D. | NYBG | 202NAT324

\$85/\$95 *Certificate Elective*



©Lisa Whitmer

**THE SCIENCE OF TREE COMMUNICATION**

Trees may appear to be strong and silent, but they can “talk”—to one another, to other plants, and to animals and insects. Discover how trees communicate via chemical signals in the air (to warn each other of insect attacks), as well as through complex fungal networks underground to transfer nutrients and resources to one another (sometimes to assist sick trees).

2 Tuesdays, 12/3 & 12/10, 6–9 pm  
Steve Kutos | Manhattan | 202BOT385A

2 Wednesdays, 1/22 & 1/29, 10 am–1 pm  
Elle Barnes | NYBG | 203BOT385B

\$125/\$139 *Certificate Elective*

**NATIVE FLORA IN WINTER**

Learn to recognize the characteristics of native and common woody plants in the winter. While in their dormant, leafless state, trees and shrubs can be identified by bud types, leaf scars, fruit remnants, and other distinguishing marks. Specimens examined in class are supplemented by forays around the Garden. Dress for the weather.

4 Fridays, 1/10–1/31, 10 am–1 pm  
Nancy Slowik | NYBG | 203BOT332

\$295/\$325 *Certificate Requirement*

**NEW! *Lichens Revealed***

Lichen, ©Murray Foubister, Flickr

Join NYBG lichenologist James Lendemer for an in-depth look at these amazing and important fungi. Use microscopes to observe and distinguish species common in the New York City area. Find out how lichens get their color and how those colors can be used to identify genera and species. Revel in the wondrous beauty of lichens for three sessions that conclude with a chance to use your new skills during a lichen adventure on the Garden grounds.

Wednesday–Friday, 10/2–10/4, 10 am–1 pm  
James Lendemer, Ph.D. | NYBG | 202BOT388

\$295/\$325 *Certificate Elective*

**PRESSING PLANTS FOR ART & SCIENCE**

From the field to the folder, this course covers the essentials of making museum-quality preserved plant specimens suitable for research, education, and decoration. Learn techniques and skills for collecting and preserving plants of your interest, wild or cultivated. Build your own herbarium, useful as a permanent record and study-aid for other Botany and Horticulture courses—or for artistic appreciation.

4 Tuesdays, 1/14–2/4, 4:30–7:30 pm  
Daniel Atha and Sheranza Alli | NYBG | 203BOT338

\$365/\$395 *Certificate Elective*

**NEW! WINTER MUSHROOMS**

Even after many plants have begun their long winter's sleep, fungi are still very active. For some species like Velvet Foot and Turkey Tail, winter is high time! Enoki and Oyster Mushrooms can be found in our forests and parks. We'll explore these table favorites in the classroom and in their habitats.

2 Thursdays, 1/23 & 1/30, 10 am–1 pm  
Paul Sadowski | Manhattan | 203BOT394A

2 Tuesdays, 2/11 & 2/18, 10 am–1 pm  
Paul Sadowski | NYBG | 203BOT394B

\$145/\$159 *Certificate Elective*

**NEW! INTRODUCTION TO URBAN ECOLOGY**

Discover how urbanization is changing biodiversity, interspecies relationships, and even animal behavior, in the tri-state area and beyond. Liz Johnson, former manager of AMNH's Metropolitan Biodiversity Program, will introduce you to the particular habitats found here, as well as which plants and animals are common to each. She'll also reveal why certain species of flora and fauna (like the new genus of centipede she and K. Catley discovered in Central Park!) thrive in our highly altered, fragmented urban environment, and which do not, and what this means for our collective future.

2 Thursdays, 2/27 & 3/5, 11 am–1 pm  
Liz Johnson | NYBG | 203NAT338

\$85/\$95 *Certificate Elective*

**NEW! URBAN FLORA: GROWING BETWEEN THE CRACKS**

Urban flora can be found growing in unlikely places, from city sidewalks and highway medians to lawns, and other man-made structures. Most of these plants are introduced and many are considered weeds. We will hear more about their origins, life cycles, and benefits to the urban landscape while learning how to identify them in the field.

2 Wednesdays, 5/20 & 5/27, 10 am–1 pm  
Nancy Slowik | NYBG | 204NAT332

\$85/\$95 *Certificate Elective*

**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 while walking along trails in the Garden. Explore the biodiversity within your chosen study patch and incorporate methods for assessing vegetation, animal life, and habitats. You will prepare a report based on data collected and presented in class, which will become part of your final project. 📖 Prerequisite: *Introduction to Natural History*

3 Wednesdays, 6/3–6/17 (Rain date 6/24),  
10 am–1 pm

Nancy Slowik | NYBG & Central Park | 204NAT323

\$225/\$245 *Certificate Requirement*



©Lisa Whitmer

# Wellness

*Exercise or meditate within the Garden or find new ways to bring healthful plants into your everyday life.*



©Jeanette Gurney, *Lilac Gardens*, Watercolor

## 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.

8 Saturdays, 9/21–11/23 (no class 10/5 & 10/12), 10–11 am

Robert Torres | NYBG | 201WEL102A

8 Saturdays, 1/25–3/21 (no class 2/15), 10–11 am  
Robert Torres | NYBG | 203WEL102B

\$119/\$129

## FOREST BATHING

When surrounded by the tranquil beauty of nature, the mind naturally becomes quiet and peaceful. This is reflected in Japanese Zen, where silent meditation in serene environments is a core element of the practice. Buddhist monks, trained in Japanese Zen and Theravada meditation, lead us on a journey of inner exploration: practicing sitting and walking meditation in NYBG's Thain Family Forest.

Tuesday, 9/24, 10 am–1 pm

Bhante Suddhaso | NYBG | 201WEL145C

Friday, 10/4, 10 am–1 pm

Bhante Suddhaso | NYBG | 202WEL145A

\$55/\$59

## ESSENTIAL OIL PERFUME WORKSHOP

Perfume can be traced back thousands of years to an Ancient Egyptian tradition, beloved by Cleopatra. Discover the history of perfume and the therapeutic benefits of essential oils in this hands-on workshop. Learn scent-blending techniques and how to identify and keep perfume notes. Formulate three unique signature scents using wax, carrier oils, and essential oils, and take home one solid perfume, a 2-oz. aromatherapy spray, and a roll-on perfume.

Saturday, 10/19, 11 am–2 pm

Ursula Basch | Manhattan | 202WEL134A

Saturday, 2/1, 11 am–2 pm, 11 am–2 pm

Karine Gordineer | NYBG | 203WEL134B

Saturday, 2/8, 11 am–2 pm

Ursula Basch | Manhattan | 203WEL134C

\$95/\$105

## NEW! FACE SERUM WITH ESSENTIAL OILS

With their anti-inflammatory and anti-bacterial properties, essential oils help us look and feel our best. Learn how your skin works and what it needs to stay healthy. Discover which essentials oils best meet your needs and match your skin type. You'll work with several carrier oils as you make your own personalized face serum.

Saturday, 10/26, 11 am–1 pm

Amandine Peter | NYBG | 202WEL149A

Wednesday, 3/25, 11 am–1 pm

Amandine Peter | Manhattan | 203WEL149B

\$85/\$95

Wellness classes are presented for informational purposes only and are not intended for self-medication.

**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.

Saturday, 11/2, 11 am–1 pm  
Karine Gordineer | NYBG | 202WEL109

\$65/\$69

**SOAPMAKING WORKSHOP**

Bring the bouquet of a summer garden indoors with handmade, naturally moisturizing glycerin soaps. You'll learn the traditional melt and pour process and combine fragrances of various dried herbs and essential oils—lavender, rosemary, mint, and more—to make four bars to take home.

Sunday, 11/3, 11 am–2 pm  
Elizabeth Scholl | NYBG | 202WEL143A

Saturday, 1/25, 11 am–2 pm  
Elizabeth Scholl | NYBG | 203WEL143B

\$115/\$125

**CANDLEMAKING WITH ESSENTIAL OILS**

Freshen your home while experiencing the soothing benefits of essential oils. Create custom-scented aromatherapy soy candles using essential oils to invigorate, calm, or heal. Learn the differences between petroleum-based paraffin candles and synthetic essential oil candles commonly sold in stores. Create and take home two 4-oz. container candles and two 2-oz. votive candles.

Sunday, 12/15, 12–3 pm  
Karine Gordineer | NYBG | 202WEL138A

Saturday, 3/14, 11 am–2 pm  
Donna Gomirato | Manhattan | 203WEL138B

\$95/\$105

**HERBALISM: BEYOND THE BASICS**

Take a deep dive into a hands-on approach to herbal medicine. We'll cover the medicinal properties and uses of close to 100 local or easy-to-source healing plants, from nervines that calm to cardiotonics that stimulate circulation. Herbalist Karine Gordineer will show you how to properly infuse, blend, and decoct as you create your own herbal apothecary that will include teas, salves, tinctures, syrups, vinegars, compresses, and poultices.

4 Saturdays, 1/11, 2/8, 3/14, & 4/18, 11 am–4:30 pm  
Karine Gordineer | NYBG | 203WEL161

\$425/\$469

**GUT HEALTH: THE KEY TO YOUR IMMUNE SYSTEM**

Your digestive system is home to over 70% of your immune system! So keeping your gut in tip-top shape is crucial to maintaining good health. We will examine the difference between good and bad bacteria and explore how each affects your energy level, skin, and overall health. We'll focus on how to strengthen your digestion and create better eating habits, including by introducing fermented foods and herbal medicine into your diet.

Tuesday, 1/14, 7–9 pm  
Cheryl Paswater | Manhattan | 203WEL215

\$45/\$49

**MEDICAL CANNABIS**

Some 29 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.

Friday, 1/24, 10 am–11:30 pm  
Stephen Dahmer, M.D. | NYBG | 203WEL128A

Thursday, 3/12, 6–7:30 pm  
Stephen Dahmer, M.D. | Manhattan | 203WEL128B

\$35/\$39

**NEW! HERBS FOR WINTER BLUES**

The darker days of winter can take away some of your sparkle. Learn which herbs and foods can keep you buoyant! We'll discuss and taste an array of herbs, such as lemon balm, St. John's wort, holy basil, and motherwort—and explore creative ways to use them in food and medicine. Create two remedies to take home, along with recipes for more.

Tuesday, 2/4, 6:30–8:30 pm  
Dawn Petter | Manhattan | 203WEL154

\$85/\$95

**NEW! WINTER SKINCARE**

By February your skin needs a boost! Learn how to combine herbal properties with aromatherapy to create personalized, botanically based products. We will make herb-infused oils, water infusions and decoctions, extracts, and aromatherapy blends to be used for skincare. You'll also see a demo on how to make an essential oil, a hydrosol, and a flower essence.

Saturday, 2/22, 11 am–3 pm  
Elizabeth Scholl | NYBG | 203WEL168

\$115/\$125

# Herbal Saturday

OCTOBER 5 | Midtown Education Center, Manhattan

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



10:30 am–12 pm

**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.

Ursula Basch | 202WEL130B | \$65/\$69

12:45–2:15 pm

**HERBAL PREPARATIONS WORKSHOP**

Learn how to select fresh and dried herbs and turn them into natural teas, decoctions, tinctures, and salves from Ursula Basch, founder of The Herbal Bear School of Botanical Medicine. Your homemade products will be fresher, longer lasting, and more economical than those from the store. Make your own herbal tincture to take home.

Ursula Basch | 202WEL130C | \$79/\$85

3–5 pm

**NEW! MEDICINAL HERBS AND ROOTS**

The fall harvest can connect us deeply to the healing energies of Earth and keep us grounded as the season shifts from summer to autumn. Learn how to use the sweet nourishment from both edible and medicinal plants for nutrient-dense remedies and foods. Two remedies made in class are included, as well as recipes and tastings.

Dawn Petter | 202WEL130D | \$65/\$69

**All Three Sections:  
202WEL130A | \$179/\$195**

## ACADEMIC POLICIES & PROCEDURES

### GENERAL COURSE INFORMATION

#### 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 718.817.8747 for help creating an online account, to receive grades over the phone, or request a transcript.

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

#### Previous Education Credit

A student may qualify for course exemption through:

- College courses taken for degree credit from an accredited college or university
- Evaluated non-collegiate sponsored instruction
- Proficiency exams

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

#### Attendance

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

#### Student Work

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

#### Certificate Requirements

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

To qualify for a Certificate, students must receive passing grades in all required courses.

Students have 6 years from the start of their first required course to complete a Certificate.

#### Certificate Graduation Ceremony

The 2020 ceremony will be held on Sunday, June 7. 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](mailto:adultedgraduation@nybg.org) by February 21. You will be informed if you are eligible for a Certificate by April 17. Call the Registration Office at 718.817.8747 with any questions.

#### Transcripts

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

#### 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.

## 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](http://nybg.org/adulted) with your organization's logo.



### Tri-State Botanical Artists of NYBG (TSBA)

TSBA is a lively group more than 40 artists who meet to engage in critiques, monthly art challenges, a sketchbook exchange, and topical discussions. We invite all current Certificate students and alumni to join us! TSBA is recognized as an ASBA Circle. Meetings are free and held once a month at NYBG. Meetings are free and held once a month at NYBG. Please contact Jeanne Reiner [reinerj@hotmail.com](mailto:reinerj@hotmail.com) or Susan Sapanara [ssapanara@gmail.com](mailto:ssapanara@gmail.com) for more information.

### 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 that extend beyond the classroom into 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 or drop by one of the scheduled meetings.

### 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](http://ahta.org)

### American Institute of Floral Designers (AIFD)

AIFD is a non-profit organization dedicated to establishing, maintaining, and recognizing the highest standard of professional floral design. AIFD and its worldwide accredited members present educational programs and design flowers for such renowned events as the Tournament of Roses Parade, the Academy Awards, and presidential inaugurations. NYBG is an AIFD Education Partner. For more information visit [aifd.org](http://aifd.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 membership and more information visit [asba-art.org](http://asba-art.org)

### Association of Professional Landscape Designers (APLD)

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

### Department of Environmental Conservation (DEC)

The New York State Department of Environmental Conservation (DEC) requires commercial pesticide applicators to take a 30-hour course such as Preparation for Pesticide Applicator Certification Examination (HRT 357) offered at the Garden, and pass a State-administered exam. Applicators must periodically apply for recertification and must complete a number of courses that the DEC and the New Jersey State Department of Environmental Protection (DEP) have approved for recertification credit.

### 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 more information visit [gnsi.org](http://gnsi.org)

### 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](http://isa-arbor.com)

### Northeast Organic Farming Association (NOFA)

NOFA offers CEUs to Accredited Organic Land Care Professionals (AOLCPs) who have made a commitment to practice in accordance with NOFA Organic Land Care Standards, to pursue ongoing education in methodology, and to create ecologically sound landscapes and living environments for their clients. For a complete list of NYBG courses that qualify visit [nofa.org](http://nofa.org)

### The New York Botanical Garden & 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 NYBG at 718.817.8747 or Adijat Adebola at [adijat.adebola@bcc.cuny.edu](mailto:adijat.adebola@bcc.cuny.edu) or 718.289.5538.



## SCHOOL OF PROFESSIONAL HORTICULTURE

The New York Botanical Garden's School of Professional Horticulture offers a comprehensive, full-time, two-year program combining the challenge of hands-on training with academic study to educate you to become a skilled and knowledgeable professional horticulturist. Our graduates enjoy 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.

As a student in the School of Professional Horticulture you:

- Develop a strong foundation in horticultural and botanical sciences, including native plants, green roofs, urban agriculture, sustainability, greenhouse management, and ecological garden design.
- Get hands-on training with NYBG's expert horticulturists and botanists.
- Visit nurseries, public and private gardens, ecological sites such as the New Jersey Pine Barrens, and celebrity estates.
- Attend lectures and meetings with horticulture and landscape experts from around the world.

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

Applications are due August 1 for the program beginning the following January. For a catalog, visit [nybg.org/edu/soph](http://nybg.org/edu/soph) or call 718.817.8797.

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11/2	10 am	Intro to Landscape Design	46
1/6	6:15 pm	Landscape Design I: Site Analysis and Schematic Design	47
1/7	6:15 pm	Graphics I	47
1/13	6:15 pm	Landscape Design History	46
1/16	6:15 pm	Graphics II	47
2/22	10 am	Intro to Landscape Design	46
3/7	10 am	Building a Green Wall	29
3/19	6:15 pm	Graphics III	47
3/31	6:15 pm	Landscape Design History	46

PHOTOGRAPHY			Page
2/26	1 pm	Learning to See: Basic Composition	51

URBAN NATURALIST			Page
10/7	10 am	Natural History of Birds	54

WELLNESS			Page
10/5	10:30 am	Intro to Herbal Medicine	57
10/5	12:45 pm	Herbal Preparations Workshop	57
10/5	3 pm	Medicinal Herbs and Roots	57
10/19	11 am	Essential Oil Perfume Workshop	56
1/14	7 pm	Gut Health: The Key to Your Immune System	57
2/4	6:30 pm	Herbs for Winter Blues	57
2/8	11 am	Essential Oil Perfume Workshop	56
3/12	6 pm	Medical Cannabis	57
3/14	11 am	Candlemaking with Essential Oils	57
3/25	11 am	Face Serum with Essential Oils	56

### NEW CANAAN NATURE CENTER 144 Oenoke Ridge (Rt. 124), New Canaan, Conn.

10/1	10 am	Woodland Wildscaping	20
10/3	10 am	Plants for Landscaping	37
10/15	11 am	Fundamentals of Gardening	31
11/7	11 am	Simple and Sleek Floral Design Ideas	20
12/3	10 am	Holiday Winter White Tablescape	22
1/9	10:30 am	Fundamentals of Garden Design	31
1/29	10:30 am	Perennial Plant Combinations	29
2/22	10 am	Spring Gardeners Task List	33
2/22	12:45 pm	Soil Basics: Get it Right!	33
2/22	3 pm	Pruning: Shape-Up for Spring	33
2/29	10 am	Pruning: How, When, and Where	30
3/5	10 am	Intro to Landscape Design	46

## REGISTRATION

**Registration** | *The quickest way to register for a class is to visit [nybg.org/adulted](http://nybg.org/adulted)*

Classes are filled in the order that payments are received. Many classes fill quickly, so please sign up early to avoid disappointment!

### Confirmations

Registration confirmations will be sent same day via email.

## GENERAL INFORMATION

### 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.*

For closings due to weather, check our website or call 718.817.8747 at the times noted below for a recorded message on the status of your class:

7:30 am for classes beginning at 9–11:45 am

10:30 am for classes beginning at 12–3 pm

1 pm for classes beginning at 3:15–8 pm

**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

The New York Botanical Garden is accessible to persons with disabilities. Please ask about special needs accommodations when you register or visit [nybg.org](http://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](http://nybg.org/membership)

### Library

The LuEsther T. Mertz Library keeps Adult Education required reading on reserve, has study space with WiFi available, and offers help with class assignments. Visit [nybg.org/library](http://nybg.org/library) or contact [libref@nybg.org](mailto:libref@nybg.org) for more information.

### Gift Certificates

Need the perfect gift for that plant-loving someone? Purchase a gift certificate at [nybg.org/adulted](http://nybg.org/adulted) for a NYBG class and give the gift of learning.

## REGISTRATION IS EASY!

### Web

Register online at [nybg.org/adulted](http://nybg.org/adulted)

### Phone

718.817.8747 Registration Office  
M–F 9 am–5 pm

### In Person

Drop by the Registration Office in the Watson Education Building, Room 306, or at the Midtown Education Center.

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

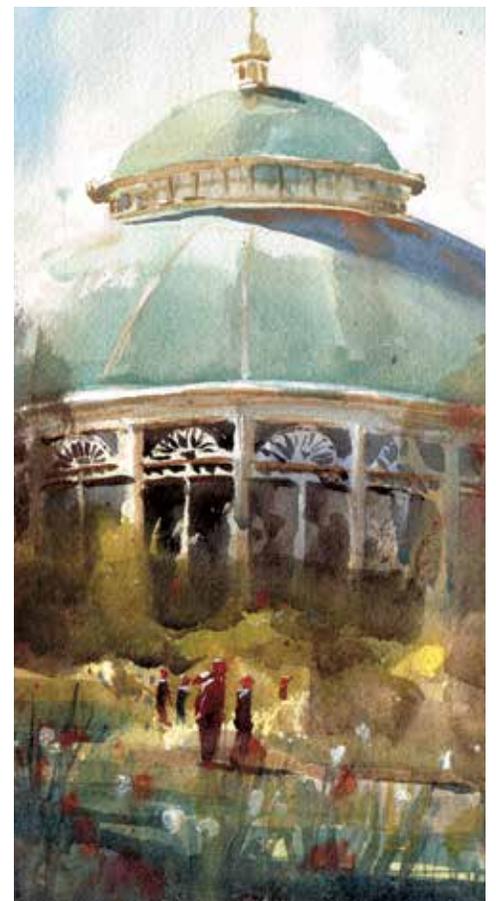


Metro-North Railroad to Botanical  
Garden Station



**Midtown Education Center** | Two blocks  
from Grand Central Terminal

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



New York Botanical Garden  
2900 Southern Blvd  
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.

*Courses meet in our 250 magnificent acres in the Bronx and at our Midtown Education Center at 20 West 44th Street, just 2 blocks from Grand Central Terminal.*



The New York Botanical Garden is located on property owned in full by the City of New York, and its operation is made possible in part by public funds provided through the New York City Department of Cultural Affairs.



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