

**SIGN UP HERE** 

ART

# WINTER CLASSES



**A**t the dawn of a new decade, we hope you will join us to explore hidden talents, engage your senses and feed your fascination with plants and horticulture. We are proud to offer many new opportunities for personal enrichment, learning and professional development. Whether you are interested in science and innovation, cuisine, living well, horticulture or creating a masterpiece, you will find something in the winter schedule to explore.

Don't miss this chance to hear from the Garden's experts and learn from our experienced instructors. Join us for a class and become part of a friendly community of learners, creators, and innovators at Fairchild.

## ONLINE REGISTRATION IS NOW OPEN!

View a full description of classes and register at [fairchildgarden.org/classes](http://fairchildgarden.org/classes).

For assistance, call 305.663.8099. Please have your membership number and credit card ready. Advance registration is required and payment is due with registration. Please plan ahead, as walk-ins are not accepted. Fees cannot be transferred or prorated.

Not a member? Become a member online at [fairchildgarden.org/membership](http://fairchildgarden.org/membership).

For more information, call 305.667.1651, ext. 3373.

*Refunds (less a 20% service fee) will be made for cancellations received at least seven days prior to classes and workshops. No refunds will be given for missed classes. Classes are not interchangeable. Classes may be canceled if minimum enrollment is not reached.*



### DRAWING: THE BASICS

*Carlos Gallostra*

This popular beginner class on the basics of drawing offers the opportunity to master basic drawing techniques as a goal in itself or as a tool for use in other media, such as watercolor, acrylic, or oil. Through in-depth studies of Bargue plates, learn the technical skills needed to translate three-dimensional objects into two-dimensional drawings.

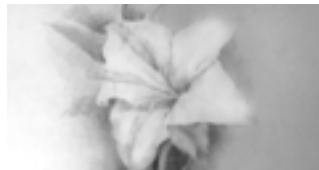
10:00 a.m. to 1:00 p.m.

Section A: Mondays, January 13 to March 9 (seven sessions)\*\*

\*\*no class 1/20 and 2/17

Section B: Mondays, March 16 to April 27 (seven sessions)

Fee per section: Member, \$190; Non-member, \$235



### DRAWING: INTERMEDIATE AND BEYOND

*Carlos Gallostra*

This intermediate drawing class explores different types of media and reinforces methods in drawing from observation with topics addressing studies in value and color. The workshop encourages students to enhance their artistic practice through studio studies and independent drawing projects.

1:30 to 4:30 p.m.

Section A: Mondays, January 13 to March 9 (seven sessions)\*\*

\*\*no class 1/20 and 2/17

Section B: Mondays, March 16 to April 27 (seven sessions)

Fee per section: Member, \$190; Non-member, \$235



### INTRODUCTION TO WATERCOLORS

*Marilyn Valiente*

No other medium can have the transparency and brilliance of watercolors. In this class for beginners, we will cover all the basic skills that will not only provide a solid foundation but also increase your confidence in mastering watercolors and creating beautiful finished paintings.

10:00 a.m. to 1:00 p.m.

Section A: Mondays, January 13 to March 9 (seven sessions)\*\*

\*\*no class 1/20 and 2/17

Section B: Mondays, March 16 to April 27 (seven sessions)

Fee per section: Member, \$230; Non-member, \$290



### BOTANICAL ART AND WATERCOLOR FOR THE BEGINNER

*Anne-Marie Jewell*

This course is for students who have little or no previous experience in watercolor or botanical drawing. You will start with an observational drawing of a beautiful botanical specimen collected from the Garden. Each student will then be carefully guided to produce a botanical painting by the end of the four-week course.

9:30 a.m. to 12:30 p.m.

Tuesdays, January 14 to February 4 (four sessions)

Fee: Member, \$132; Non-member, \$165

# ART



## DRAWING THE PORTRAIT IN GRAPHITE

*Carlos Gallostra*

This class introduces you to a step-by-step process that facilitates capturing a portrait from the initial contour to the fully rendered form, in graphite or charcoal.

10:00 a.m. to 1:00 p.m.

Section A: Tuesdays, January 14 to March 3 (eight sessions)  
Section B: Tuesdays, March 10 to April 28 (eight sessions)  
Fee per section: Member, \$216; Non-member, \$270



## SOFT PASTELS IN THE GARDEN

*Dan Bondroff*

Students at all levels are welcome to learn the fascinating art of pastels. Discover how to paint in soft pastel, considered by many as the purest of painting media.

1:00 to 4:00 p.m.

Section A: Tuesdays, January 14 to February 11 (five sessions)  
Section B: Tuesdays, February 18 to March 17 (five sessions)  
Fee per section: Member, \$165; Non-member, \$205



## PLEIN AIR IN THE GARDEN

*Carlos Gallostra*

Claim your ground, set up your palette, and let the beauty of our garden be your muse! This course is a must for intermediate to advanced

students aiming to advance their skills and confidence in plein air rendering through works in oil paint or soft pastel. You will be able to work outside and within our studio.

1:30 to 4:30 p.m.

Tuesdays, January 14 to March 3 (eight sessions)  
Fee: Member, \$190; Non-member, \$230



## PUT YOUR PASSION ON PAPER WITH WATERCOLORS

Intermediate/Advanced

*Diane Lary*

Students will learn tools and techniques including the importance of leaving whites and creating shadow, selecting a color palette to create harmony and unity, and manipulating your reference materials. Basic knowledge of watercolor painting is required.

10:00 a.m. to 1:00 p.m.

Section A: Wednesdays, January 15 to March 4\* (seven sessions)  
\*No class on February 26  
Section B: Wednesdays, March 11 to April 29\* (seven sessions)  
\*No class on April 8  
Fee per section: Member, \$230; Non-member, \$290



## ALTERED BOOKS WORKSHOP

*Mila Hajjar*

In this workshop, you will take a hardcover book (old, new, recycled) and cut, glue, burn, fold, paint, add to, collage, re-bind, and create. You may add pockets and niches to hold tags, rocks, photos, and more.

10:00 a.m. to 2:00 p.m.  
Wednesdays, January 15 to February 12 (five sessions)  
Fee: Member, \$90; Non-member, \$112



## THE ART OF PAINTING USING PALETTE KNIVES

*MaiYap*

In this class, you will receive basic instruction and frequent demonstrations on how to handle the different knives, mix colors, and apply various techniques. You will be using oils or water-mixable oils.

Section A:

10:00 a.m. to 2:00 p.m.  
Thursdays, January 16 to February 20 (five sessions)\*  
\*no class 2/13  
Fee: Member, \$220; Non-Member, \$275

Section B:

10:00 a.m. to 2:00 p.m.  
Thursdays, February 27 to April 2 (four sessions)\*  
\*No class March 5 or 12  
Fee: Member, \$176; Non-Member, \$220



## PAINTING THE PORTRAIT IN OIL

*Carlos Gallostra*

This class introduces a step-by-step process for capturing the portrait from the initial contour to the fully rendered form in oil paint. Topics will range from ideas on value and color mixing to techniques meant to finalize the turn of form and the relationship of darkness and lights. This class is not for beginners. Students will work on independent projects and should have prior experience in both drawing and painting.

10:00 a.m. to 1:00 p.m.  
Section A: Thursdays, January 16 to March 5 (eight sessions)  
Section B: Thursdays, March 19 to May 7 (eight sessions)  
Fee per section: Member, \$216; Non-member, \$270  
**FROM THE GROUND UP: PAINTING THE STILL LIFE IN OIL**



*Carlos Gallostra*

You will learn to facilitate drawing from observation, dive into theories on value and color, and apply a stronger understanding of oil painting techniques to turn the form, capture the light, and finalize a realistic record of your subject.

1:30 to 4:30 p.m.

Section A: Thursdays, January 16 to March 5 (eight sessions)  
Section B: Thursdays, March 19 to May 7 (eight sessions)  
Fee per section: Member, \$216; Non-member, \$270  
**OPEN STUDIO WITH MARCELLE**



*Marcelle Zanetti*

Artists of every level are welcome to spend Friday mornings in the studio with Marcelle. Time will be spent painting independently, with critiques at the end of every class. This class is open to students using oils, acrylics, and water-based oils.

10:00 a.m. to 2:00 p.m.

Section A: Fridays, January 31 to February 28 (five sessions)  
Section B: Fridays, March 6 to April 10 (five sessions)\*\*  
\*\*no class 3/27  
Fee per section: Member, \$220; Non-member, \$275

## ART



### **WATERCOLORS: THE NEXT STEP**

(Intermediate/Advanced)  
*Ricardo Aberle*  
This class will expand your knowledge of the various techniques. Students will work at their own pace to develop their unique, creative style. There will be optional critiques and group interaction, but the majority of the class will be spent painting and receiving one-on-one guidance from the instructor.

10:00 a.m. to 1:00 p.m.  
Section A: Fridays, January 31 to February 28 (five sessions)  
Section B: Fridays, March 6 to April 10 (five sessions)  
Fee per section: Member, \$165; Non-member, \$210



### **INTRODUCTION TO PHOTO ENCAUSTIC HOT WAX PAINTING**

*Andrea Clement*  
Take your photographs to a new creative level with the ancient art of encaustics—a mixed-media technique that involves applying a heated beeswax medium to a surface and then incorporating other materials such as paint, ground pigments, and collaged elements upon and within the wax.

10:00 a.m. to 2:00 p.m.  
Tuesday/Wednesday,  
March 3 and 4 (two sessions)  
Fee: Member, \$88;  
Non-member, \$110;  
Supplies fee: \$40, payable to instructor

## MOMMY & ME



### **MOTHER NATURE AND ME**

*Caroline Parker*  
Parents/caretakers and their little ones are invited to make memories together at Fairchild with Create Miami Art Instructors. Each class includes storytime, garden exploration and nature craft activity! Engage in social, tactile and creative fun. Bond with your little one over finger painting, confetti, and glue, and leave the cleanup to us!

Section A: 9:30 – 10:15 a.m.  
Section B: 10:30 – 11:15 a.m.  
Fridays, January 21 – February 25 (six sessions)  
Fee: Member, \$150;  
Non-member, \$200



### **JOURNEY INTO THE SELF FOR HEALTH & WEALTH WITH QIGONG**

*Lilly Lei, M.D.*  
This class begins building the energetic foundation for this ancient Chinese practice for longevity, the Five Elements of Medical Qigong. Energizing and mood-elevating, qigong is naturally conducive to increased self-awareness and examination. You can practice it indoors or outdoors, and it doesn't take much space or equipment—just you and a chair.

10:30 a.m. to noon  
Fridays, January 17 to February 21 (six sessions)  
Fee: Member, \$150;  
Non-member, \$200



### **PILATES IN THE AFTERNOON AT FAIRCHILD**

*Maureen O'Rourke*  
Pilates is a non-impact movement style that develops long, lean muscles and incorporates techniques that enhance concentration, control, centering, relaxation, and breath. This method improves postural integrity, stabilization and balance while simultaneously stretching and strengthening the muscles. You must be comfortable sitting and lying on the floor; prior to enrollment, the instructor will consult with newcomers.

4:30 to 5:30 p.m.  
Thursdays, January 23 to February 27 (six sessions)  
Fee: Member, \$90;  
Non-member, \$110

## WELLNESS



### **FENG SHUI WITH A PURPOSE—INTRODUCTORY COURSE**

*Lilly Lei, M.D.*  
Organize your home and/or office according to your life's purpose with Feng Shui—the art and science of managing your environment (external and internal) to improve life. You'll be introduced to a wide range of effects it offers, such as helping you find a positive energy area to support work or study, or a healing area to speed recovery from illness.

2:00 to 4:00 p.m.  
Sunday, February 23  
(one session)  
Fee: Member, \$60;  
Non-member, \$90



### **LITTLE SPROUTS YOGA— MOMMY OR DADDY AND ME**

*Debie Lee*  
This baby and grownup yoga class gives adults the opportunity to gain strength and tone muscle while bonding, stretching, and playing with their babies. Grownups and little ones will enjoy breathing techniques to calm you both, gentle baby massage and stretches, asanas and stretching for grownups, sharing and more! For babies 6 weeks to 3 years old.

9:30 to 10:15 a.m.  
Tuesdays, March 3 to April 7  
(six sessions)  
Fee: Member, \$90;  
Non-member, \$110

# HORTICULTURE



## CREATE YOUR OWN TERRARIUM - FAMILY CLASS

*Debie Lee*

Join master gardener Debie Lee for some family fun while creating your own gnome and fairy garden. Together, you and your child will design your own tabletop garden inspired by your imagination. All supplies to create one tabletop garden will be provided.

5:30 to 7:30 p.m.  
Tuesday, January 21  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## TROPICOLOR PLANTING COMBINATIONS FOR SOUTH FLORIDA GARDENS

*Carlos Somoza*

Join Miami landscape designer Carlos Somoza on a journey through subtropical gardens and their stunning plant combinations, which can be used in your gardens and on your balconies. Fundamental planting design principals, including color, form, and texture, will be discussed, as will the basic culture and characteristics of the highlighted plant palettes.

6:30 to 8:30 p.m.  
Thursday, January 30  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## PLANT GROWTH REGULATORS' APPLICATION ON ORNAMENTAL PLANTS

*Dr. Amir Khoddamzadeh*

Learn about Plant Growth Regulators (PGRs) and their applications. Dr. Amir Khoddamzadeh, a Florida International University instructor and undergraduate director of its Earth and Environment program, will explain how to use PGRs in your home garden to improve rooting, promote uniform branching, increase floral induction, and control height.

10:00 a.m. to noon  
Saturday, February 1  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## GROWING PLANTS IN CONTAINERS: THE ART AND SCIENCE OF PORTABLE HORTICULTURE

*Dr. Chad Husby*

Most of the plants we grow in gardens spend at least part of their life in containers. However, many aspects of growing plants in pots, from pot size and shape to the types of soil mix, watering and fertilization, are poorly understood. This course will explore and demonstrate basic insights from physics, chemistry and biology that help us to better care for our potted plants. Common myths and misconceptions of container horticulture will also be discussed.

Section A: 6:30 to 8:30 p.m.  
Wednesday, February 5  
(one session)  
Fee: Member, \$30;  
Non-member, \$40

Section B: 6:30 to 8:30 p.m.  
Tuesday, April 21 (one session)  
Fee: Member, \$30;  
Non-member, \$40



## WATER GARDENING

*Dr. Brett Jestrow*

This hands-on and interactive class will introduce you to the scope and nature of garden water features. You will learn how to design the perfect garden and select the right plants, and why water quality is so important. To provide inspiration and context, this class includes a tour of Fairchild's spectacular water gardens.

Section A: 10:00 a.m. to noon  
Saturday, February 8 (one session)  
Fee: Member, \$30;  
Non-member, \$40

Section B: 10:00 a.m. to noon  
Saturday, March 2 (one session)  
Fee: Member, \$30;  
Non-member, \$40



## GARDENING WITH GINGERS

*Dr. Carl Lewis*

From tiny herbs to massive mega-perennials, gingers and their relatives provide dramatic foliage and color, year-round cut flowers, and unique culinary ingredients. This class includes a tour of Fairchild's gingers and a demonstration of how we propagate, plant, and maintain them. We'll discuss the gingers you can try in your own garden or indoors, including tips on where to find unusual species.

10:00 a.m. to noon  
Saturday, February 15  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## THE ART AND SCIENCE OF GROWING ORCHIDS IN SOUTH FLORIDA

*Dr. Sandra Schultz*

Whether you are new to orchids or have been growing them and want to learn more, you'll enjoy discussing the orchid family with an introduction to genera, species, and their culture. You'll learn about the best locations for growing orchids, repotting, mounting, placing them in the landscape, pests, diseases, and fertilizers.

10:30 a.m. to 12:30 p.m.  
Wednesdays, February 19 to  
March 4 (three sessions)  
Fee: Member, \$90;  
Non-member, \$120



## LANDSCAPING WITH ORCHIDS

*Peter Kouchalaks*

With proper care, you can introduce fabulous ground-growing orchids to your tropical garden or your pool patio. You'll learn about the types of garden habitats these orchids require and what you can expect in the way of performance. A variety of orchids will be available for sale after class;

10:00 a.m. to noon  
Saturday, February 22  
(one session)  
Fee: Member, \$30;  
Non-member, \$40

# HORTICULTURE



## DISCOVERING THE NATIVES ORCHIDS OF SOUTH FLORIDA LECTURE AND TOUR

*Dr. Jason Downing and Jay Arce*  
Through this lecture and garden tour, you'll learn to identify Florida's orchids and view living samples around Fairchild. You'll see Fairchild's orchid Micropropagation Lab and become a steward of The Million Orchid Project when you transplant an orchid in the Garden and take one home to transplant in your yard.

10:00 a.m. to noon  
Saturday, February 29  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## GROWING ORCHIDS IN SOUTH FLORIDA

*Dr. Sandra Schultz*  
Learn tips and techniques to successfully purchase, grow and enjoy orchids. Cultural requirements for common orchids will be addressed, with demonstrations of dividing and repotting orchids, how to choose potting materials, and types of orchid pots and mounts.

6:30 to 8:30 p.m.  
Thursday, March 5 (one session)  
Fee: Member, \$30;  
Non-member, \$40



## THE ART AND SCIENCE OF FERNS

*Jennifer Possley*  
Combining biology lessons, horticulture, and a nature walk,

this class is an introduction to South Florida's native ferns. After all, Miami-Dade County is the No. 1 fern diversity hotspot in the continental U.S. Students will observe spore prints in the classroom and each student will receive a spore germination container and add the species of his or her choice to bring home.

1:00 to 3:00 p.m.  
Saturday, March 7  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## PRUNING—HURRICANE PREPAREDNESS

*Nathaniel Cockshutt*  
During hurricane season, the right tree in the right place may help protect your property from strong winds by acting as a buffer. But improperly pruning trees before a storm can increase the possibility they will break or fall more easily during the storm. In this class, you'll learn practical tips and techniques for preparing your yard for hurricane season.

10:00 a.m. to noon  
Saturday, March 7  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## INTRODUCTION TO BONSAI

*Ray Kincaid*  
You will learn the basics of bonsai, including a brief history, basic care and maintenance, tools, styles, and the rules that govern styling a bonsai tree. You'll also see a tree worked from its native state to create a pre-bonsai suitable for potting. Each

student will receive a pre-bonsai that they will plant into a pot to take home.

Section A  
6:00 to 9:00 p.m.  
Tuesday, March 10  
(one session)  
Fee: Member, \$30;  
Non-member, \$40

Section B  
10 a.m. to 1:00 p.m.  
Saturday, April 4 (one session)  
Fee: Member, \$30;  
Non-member, \$40

## BROMELIADS: EASY



## TROPICALS FOR YOUR SOUTH FLORIDA GARDEN

*Peter Kouchalacos*  
Learn the basics of growing these attractive, adaptable, and colorful epiphytes, in the ground, on trees, or in pots. You'll go through propagating pups, choosing the optimum growing medium and containers, watering and misting, providing air circulation and lighting, fertilizing, and methods of combating pests.

6:30 to 8:30 p.m.  
Tuesday, March 17 and 24  
(two sessions)  
Fee: Member, \$60;  
Non-member, \$80



## PROPAGATION 101

*Brian Harding and Sabine Wintergerst*  
Discover how plant propagation plays a role in the conservation of rare, threatened, and endangered plants of South Florida and the Caribbean. Horticultural techniques and propagation methods will be demonstrated in relation to conserving our globally

imperiled plants. This class takes place at Fairchild's Nursery.

9:00 a.m. to noon  
Saturday, April 11  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## BUILDING MATERIALS FOR SUBTROPICAL GARDENS

*Carlos Samosa*  
Building beautiful gardens in South Florida relies heavily on choosing the right building materials and applying common-sense construction techniques. Miami landscape designer Carlos Somoza will present both natural and man-made building material alternatives, including locally quarried and imported stone, precast pavers, and tropical hardwood decking.

6:30 to 8:30 p.m.  
Thursday, April 16  
(one session)  
Fee: Member, \$30;  
Non-member, \$40



## INTRODUCTION TO GRAFTING AND MARCOTTING

*Jorge Zaldivar*  
Grafting is the age-old practice of joining plants to specific root systems to get the desirable benefits of both parts. During this hands-on workshop, participants will receive instruction in the different techniques of grafting fruit trees. Rootstock, scionwood and tools will be provided for participants to graft their own.

9:00 a.m. to noon  
Saturday, April 25  
(one session)  
Fee: Member, \$30;  
Non-member, \$40

# CUISINE



## MEDITERRANEAN VEGETARIAN

*Chef Amy Lubchansky*

Drawing on the rich cultural traditions of the Mediterranean, we will create a vegetarian feast. On the menu: wild mushroom crostini, fresh from the farmers market salad, a Swiss chard and leek frittata, and a rustic fruit galette for dessert.

1:00 to 4:00 p.m.

Friday, January 17 (one session)

Fee: Member, \$55;

Non-member, \$70



## BREAKFAST ON THE GO

*Chef Kira Voltz*

Let Chef Kira show you delicious and nutritious make-ahead breakfasts, many catering to special diets such as gluten-free. Menu examples include toasted muesli, baked egg custards, egg burritos, tacos, and learning to flavor your own yogurt.

10:00 a.m. to 1:00 p.m.

Saturday, January 18

(one session)

Fee: Member, \$55;

Non-member, \$70



## EATING FOR VIBRANT HEALTH: FOOD IS MEDICINE

*Nick Borja, M.D.*

The way we eat plays a powerful role in determining our risk of chronic diseases like diabetes, cancer, stroke, and dementia. Dr. Borja draws on his background as a preventive

medicine physician and cancer genetics researcher, and will include both an information session and an interactive cooking demonstration.

10:00 a.m. to 1:00 p.m.

Section A: Saturday, February 1

(one session)

Section B: Saturday,

February 29 (one session)

Fee: Member, \$35;

Non-member, \$45



## RAW FOOD LIVING

*Chef Amy Lubchansky*

Make a day's worth of raw meals, from a breakfast chia pudding to a spiralized pasta lunch, to a raw taco dinner, and a walnut cocoa brownie dessert. All feature nutrient-dense plant-based ingredients.

1:00 to 4:00 p.m.

Sunday, February 2

(one session)

Fee: Member, \$55;

Non-member, \$70



## SMOOTHIES FOR THE WHOLE FAMILY

*Chef Deanna Bossert*

Learn about wholesome and nutritious ingredients to power-pack your favorite smoothies. We'll review some local South Florida smoothie ingredients, and you'll gain an understanding of how to incorporate veggies, seeds, and additional products into your smoothies or bowls.

10:00 a.m. to noon

Saturday, February 8

(one session)

For 1 adult and 1 child

Fee: Member, \$55;

Non-member, \$70



## BEYOND RICE AND POTATOES

*Chef Kira Voltz*

There are so many grains out there to explore, and all have more protein, vitamins, and minerals than rice or potatoes. You will learn about the nutritional benefits of these grains and how to prepare them in delicious side dishes or as tasty stand-alone meals.

6:00 to 9:00 p.m.

Tuesday, February 11

(one session)

Fee: Member, \$35;

Non-member, \$45



## PHO

*Chef Johnson Teh*

Learn how to make pho, Vietnam's most recognized and beloved noodle soup. Chef Teh will also share some recipes for simple appetizers.

6:00 to 9:00 p.m.

Tuesday, February 18

(one session)

Fee: Member, \$55;

Non-member, \$70



## SUSHI 101

*Chef Johnson Teh*

You will learn all the basics of sushi, beginning with where to buy ingredients. Chef Teh will guide you and as you prepare, roll, and cut the sushi.

6:00 to 9:00 p.m.

Tuesday, March 31 (one session)

Fee: Member, \$55;

Non-member, \$70



## DESSERT FOR NON BAKERS

*Chef Amy Lubchansky*

Intimidated by pastry and dough, but still want to make desserts from scratch? You don't need to be a classically trained French pastry chef to create delicious desserts at home. We will make a seasonal fruit crisp, bar cookies, and a galette.

10:00 a.m. to 1:00 p.m.

Friday, March 20

(one session)

Fee: Member, \$55;

Non-member, \$70



## FISH TACOS

*Chef Kira Voltz*

Explore fresh and lively fish wraps for a quick, easy, delicious, and nutritious meal! All of the ingredients can be wrapped in your favorite flour or corn tortilla or tossed into a bowl.

6:00 to 9:00 p.m.

Thursday, April 9 (one session)

Fee: Member, \$55;

Non-member, \$70

# INNOVATION STUDIO



## DESIGNING FOR THE FUTURE

Jordan DeWitt

Ages 13+

It's 2020, and the future starts now! What problems still exist in the world that new technology could solve? Join us for one or more of a series of design-thinking workshops where we will use Fairchild's Innovation Studio design software, machine controls, and materials to brainstorm, design and create concepts for new technologies.

**January 20:** Empathize and Define—Discern and state the problems you aim to solve

**January 21:** Ideate and Prototype—Challenge assumptions and create solutions to problems

**January 22:** Testing and Further Defining—Redefine or determine new problems based on tests

**January 23:** Prototype and Refine—Use what was learned from testing to create new solutions

6:00 to 8:00 p.m.

Monday, January 20 to

Thursday, January 23

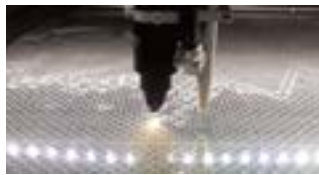
(four sessions)

Fee per session: Member, \$20;

Non-Member, \$25

Fee for all four sessions:

Member, \$75; Non-Member, \$90



## 3D PRINTING BASICS—SKILL BUILDER

Moonlighter Makerspace

Ages 13+

Make your ideas come to life! You'll learn how to create three-dimensional designs optimized for 3D printing.

This workshop is for beginners with little to no experience. You'll get to keep your custom creation!

1:00 p.m. to 3:00 p.m.

Sunday, February 16

(one session)

Fee: Member, \$40;

Non-Member, \$50



## CIRCUIT CARD CRAFTING

Jordan DeWitt

Ages 7+

Design and create an unforgettable card for your Valentine (or yourself) complete with its own LED circuit! During this workshop, you will learn basic circuitry as you create a light-up card to take home, and learn how electronic systems as simple as these are being put to use aboard the International Space Station.

6:00 to 8:00 p.m.

Thursday, February 13

(one session)

Fee: Member, \$40;

Non-Member, \$50



## CIRCUITS IN SECONDS WITH littleBits

Moonlighter Makerspace

Ages 7+

Learn how to make something light up, make a sound, move, or sense something! Using modular circuit blocks that easily snap together with magnets, you'll learn how to quickly invent functional electronic prototypes. With the additional Lego adapters, it's a fun way to build your ideas!

1:00 to 3:00 p.m.

Sunday, February 23 (one session)

Fee: Member, \$40;

Non-Member, \$50



## LEARN TO SOLDER—SKILL BUILDER

Moonlighter Makerspace

Ages 9+

This beginner electronics workshop will teach you how to solder your own LED light onto various circuit boards and perf boards. This essential skill is a good foundation for any budding hardware hacker or enthusiast.

1:00 to 3:00 p.m.

Sunday, March 8 (one session)

Fee: Member, \$40;

Non-Member, \$50



## PLANTECH—BUILDING SOIL MOISTURE SENSORS

Jordan Dewitt

Ages 13+

Apply your soldering and design skills to help care for your houseplants. Through this workshop, you will create your own soil moisture monitoring system and learn how to interpret its readings.

6:00 to 8:00 p.m.

Thursday, March 19

(one session)

Fee: Member, \$40;

Non-Member, \$50



## DIY HOME BOTANY KIT

Moonlighter Makerspace

Ages 9+

This introduction to the Growing Beyond Earth Design Challenge will have you build your own home version of Fairchild's LED plant-growing

chamber. You'll learn how to assemble the pod, solder the LED lights, and plant your edible leafy green. After, you'll get to take it home and watch it grow!

1:00 to 3:00 p.m.

Sunday, March 22

(one session)

Fee: Member, \$40;

Non-Member, \$50



## LASER ENGRAVING BASICS—SKILL BUILDER

Moonlighter Makerspace

Ages 9+

Learn how to use design software, machine controls, and various materials to create your own custom pieces with this digital fabrication technology. At the end of the session, you get to take home your creation!

1:00 to 3:00 p.m.

Sunday, April 5 (one session)

Fee: Member, \$40;

Non-Member, \$50



## PLANTECH—PLANT POD

Jordan DeWitt

Ages 13+

Re-create your own home version of NASA's Advanced Plant Habitat. Through this workshop, you will create your own egg-shaped terrarium perfect for succulent-type plants. You'll use your 3D-design, circuit-building, and other making skills to customize it.

6:00 to 8:00 p.m.

Thursday, April 9 (one session)

Fee: Member, \$40;

Non-Member, \$50

# PHOTOGRAPHY



## HOW TO USE AND MASTER YOUR INTERCHANGEABLE LENS DSLR (SINGLE LENS REFLEX) CAMERA

*Pedro Lastra*

Take advantage of your full-featured advanced DSLR camera. This class will cover which lenses are best suited to your particular needs and how to use them, as well as basic flash and lighting techniques, different focal length lenses, basic camera functions, and the unique features of your particular camera. (Please bring your camera and manual.) The class is offered to users of Canon, Nikon, Pentax, Sony, and Leica.

6:00 to 9:00 p.m.

Thursdays, January 16 and 23  
(two sessions)

Fee: Member \$70;  
Non-member, \$88



## USING IPHONEOGRAPHY TECHNIQUES DURING THE GOLDEN HOUR AND MOONRISE AT FAIRCHILD

*Shirley Drevich*

Don't miss this chance to experience the Garden with its stunning, glowing late-afternoon landscapes leading into a full moonrise. You'll learn effective techniques for taking stunning photos of the winter sunset and the Gibbous moonrise using your iPhone. Students will then spend time creatively processing their images with a few choice apps.

4:00 to 7:00 p.m.

Section A: Friday, February 7  
(one session)

Section B: Friday, March 6  
(one session)

Fee per section: Member, \$36;  
Non-member, \$45



## SUNRISE—EARLY MORNING PHOTOGRAPHY AT FAIRCHILD

*Carlos Causo*

Students will photograph Fairchild's spectacular landscapes, dramatically lit by the rising sun. Participants will receive instruction, tailored to their level, on photographing outdoors in the early morning natural light, as well as help selecting a subject and creating attractive compositions with your camera. In the field, instruction will be geared toward the aesthetic challenge of moving from documentation to interpretation.

7:00 a.m. to 9:00 a.m.

Section A: Saturday,  
February 8 (one session)

Section B: Saturday, March 28  
(one session)

Fee per section: Member, \$36;  
Non-member, \$45



## BEGINNERS PORTRAIT WITH BOTANICALS

*Sean Black*

This intermediate-level course is geared towards photographers looking to switch away from auto settings, and is targeted to eco-friendly and savvy photo enthusiasts. By learning more about your DSLR camera's manual settings, you will learn to capture what your mind's eye envisions through spot-metering and selective focusing as you take plant portraits.

1:00 to 4:00 p.m.

Saturday, February 8  
(one session)

Fee: Member, \$36;  
Non-member, \$45



## FULL MOON: NIGHT PHOTOGRAPHY

*Carlos Causo*

In this one-night class, students will photograph the rise of the moon. Sturdy tripods and cameras with interchangeable lenses or point-and-shoot cameras with close-up and user-adjustable settings are strongly recommended. This class is designed for intermediate to advanced students.

5:00 to 8:00 p.m.

Snow Moon: Sunday, February 9  
(one session)

Worm Moon: Monday, March 9  
(one session)

Pink Moon: Tuesday, April 7  
(one session)

Fee per session: Member,  
\$36; Non-member, \$45



## BUTTERFLY AND SMALL BIRD EARLY MORNING PHOTOGRAPHY

*Pedro Lastra*

Learn the skills required to master butterfly macro photography in Wings of the Tropics, Fairchild's butterfly conservatory. Sturdy tripods, cameras with interchangeable lenses or point-and-shoot cameras with close-up settings and user-adjustable settings, and a 90mm or longer macro are strongly recommended. Phones with telephoto lenses, such as the iPhone 11 and Samsung Galaxy Note 10+, can also be used for this class.

8:00 to 11:00 a.m.

Saturday, February 22  
(one session)

Fee: Member, \$36;  
Non-member, \$45



## USING THE SNAPSEED APP ON YOUR IPHONE

*Shirley Drevich*

With the Snapseed camera app, you can capture photos like never before without post-processing, and its new Pro Mode offers numerous lens and film combinations that can be applied after taking a photo. Students will learn how to shoot with the camera app, view samples of different lens and film combinations, and more.

1:30 to 4:30 p.m.

Friday, February 28  
(one session)

Fee: Member, \$36;  
Non-member, \$45



## ARTISTIC FLOWER MACRO PHOTOGRAPHY

*Pedro Lastra*

Learn to create interpretative flower images in the Garden by reviewing the best camera settings, including using shallow focus, hyperfocal techniques, and lighting techniques. In the field, you will learn how to manage the subject, use the correct approach and effectively compose the image. This class is designed for intermediate to advanced students. Current phones with telephoto lenses, such as the Apple iPhone 11 and Samsung Galaxy Note 10+, can also be used for this class.

8:00 to 11:00 am

Section A: Saturday, February 29  
(one session)

Section B: Saturday, April 11  
(one session)

Fee per section: Member,  
\$36; Non-member, \$45



# PHOTOGRAPHY



## LET NATURE BE YOUR GUIDE

*Sean Black*

This introductory class gives novice photographers the opportunity to immerse themselves in lush flora and fauna while looking closer at the hidden beauty of our natural world. Learn the basic creative and semi-manual settings of your DSLR camera and why some photographs are just more visually appealing than others.

1:00 to 4:00 p.m.  
Saturday, March 7  
(one session)  
Fee: Member, \$36;  
Non-member, \$45



## ORCHID PHOTOGRAPHY: CAPTURING THE BEAUTIES OF FAIRCHILD'S 18TH ANNUAL INTERNATIONAL ORCHID FESTIVAL

*Carlos Causo*

Orchid and photography enthusiasts will enjoy this unique opportunity to preview and photograph Fairchild's International Orchid Festival early in the morning, before the crowds arrive. You will learn how to photograph the orchids using artificial light to produce natural-looking photographs, as well as how to create attractive compositions. Advanced point-and-shoot cameras with pop-up flashes and macro capability or SLRs with macro lenses and external flashes are highly recommended.

8:00 to 10:00 a.m.  
Saturday, March 14  
(one session)  
Fee: Member, \$36;  
Non-member, \$45



## CREATIVE iPHONEOGRAPHY

*Shirley Drevich*

Explore ways to capture and process images with your iPhone and create stunning results using a variety of apps. Students will spend time capturing images in the Garden (weather permitting) and processing them in the classroom as they learn how to use various applications. An iPhone 6/6s or later and an active iTunes account are required.

10:00 a.m. to 1:00 p.m.  
Section A: Wednesdays,  
March 18 and 25  
(two sessions)  
Section B: Fridays, April 3 and  
10 (two sessions)  
Fee per section: Member, \$70;  
Non-member, \$90



## ADVANCED DSLR TECHNIQUES: GETTING MORE OUT OF YOUR DSLR CAMERA

*Pedro Lastra*

This class will cover advanced functionalities of your DSLR, including when to use RAW format vs. jpg, managing white balance options, autofocus, and multiple external flashes and light modifiers. You'll also learn the basics of using your histogram to maximize image quality and managing lens aperture and focal length. This class is for owners of Canon, Nikon, Pentax, Sony, and Leica cameras.

6:00 to 9:00 p.m.  
Thursdays, March 19 and 26  
(two sessions)  
Fee: Member \$70;  
Non-member, \$90



## STUDIO FLOWER AND STILL-LIFE PHOTOGRAPHY

*Carlos Causo*

Are you looking to take accurate photographs of your subjects? During this class, you'll receive instruction on using your camera to effectively expose, focus, and compose photographs. Time spent in demonstrations will be geared towards the challenges of accurate documentation or interpretative representation.

6:00 to 9:00 p.m.  
Tuesday, March 24  
(one session)  
Fee: Member, \$36;  
Non-member, \$45



## THROUGH THE EYE OF THE ARTIST

*Andrea Clement*

Create more artistic images by learning how to compose a good photograph and create moods and special effects. You'll learn about using lines and lighting in creative ways to create depth, using repetition and texture, and as other visual elements of art. You will take photographs in the Garden and a group critique will reinforce understanding of these concepts.

1:00 to 4:00 p.m.  
Sunday, April 5 (one session)  
Fee: Member \$36;  
Non-member, \$45



## THE INVERTED GARDEN: COLOR, STYLE & IMAGINATION

*Sean Black*

Walking alongside a professional commercial and fine art photographer and university educator, you will explore the artistic process, from developing a visual concept with a client, to capturing stylized versions of our natural world. In addition to makeshift props and gels, you'll learn to use Adobe Lightroom software to translate your otherworldly vision while retaining a superbly crafted fine-art image.

1:00 to 4:00 p.m.  
Saturday, April 11  
(one session)  
Fee: Member, \$36;  
Non-member, \$45



## PHOTO EDITING

*Pedro Lastra*

As an owner of large screen iPhone, iPad 2, iPad Air or higher, you can access endless apps for photo editing and sharing. Learn how to manipulate images, add filters, and produce new works of art to share with family and friends. In preparation for this class, students will download and install Photoshop Express, Snapseed, and Filterstorm.

1:00 to 4:00 p.m.  
Thursdays, April 23 and 30  
(two sessions)  
Fee: Member, \$70;  
Non-member, \$90