Bones to Bloom 2021Ecological Design Course

with Optional Permaculture Design Certification (PDC) Track

Solutions-oriented curriculum for creating regenerative landscapes, thinking in systems, and building healthy communities in an era of uncertainty.

Facilitated by Robyn Mello, Benjamin Weiss, Wilson Alvarez, and several specialized guest teachers

Our bodies are natural ecosystems nested within many local ecosystems, and our local ecosystems are nested within ever-expanding larger ecosystems. Each one is infinitely complex and interconnected. As a species, humans are designers and manipulators of our surroundings, building systems of control and organization on top of these ecosystems in order to make sense of our world. However, much of the time, we are working without an understanding of the vast number of elements that will be affected by our human designs. We aim to be part of the shift in human design in the direction of consistently keeping earth and community in mind.

This survey course embodies the permaculture principle to "design from patterns to details." You will begin at the foundation of regenerative design, learning to understand ecological concepts and principles through deep observation of natural patterns applicable across the human and more-than-human world. As the course continues, you will be led on a journey through ever more detailed aspects of ecological design, developing a toolkit of land-based techniques and socioecological critiques for building a new paradigm of community and economy. This approach will empower you to lay a foundation of knowledge and understanding of the core principles shared by permaculture, regenerative design, intersectional environmentalism, and similar modalities. We will demonstrate these concepts and skillsets in the classroom as well as in wild spaces, backyards, rural farmscapes, and urban farms.

Classes will take place at different locations in South-central and Eastern Pennsylvania:

Urban Edge Farm: susquehannasustainability.com

• Horn Farm Center: hornfarmcenter.org

Rising Locust Farm: risinglocustfarm.com

Green Light Plants: greenlightplants.com

Schedule:

April 11, 18*, and 25; May 2, 9*, 16, 23, and 30; June 6, 13, and 20*

Arrive by 9:30am, Class runs 10am-5pm* with 30 minutes for lunch

*April 18, May 9, and June 20 are only for students who are pursuing Permaculture Design Certification. Class runs 10am-6pm on PDC Only days.

Students must provide their own lunch.

Topics to be covered during the course include and are not limited to:

- Introductory and instrumental concepts of permaculture design
- Deep ecology
- Systems analysis
- Species identification

- Reading the landscape
- Social and spiritual ecology
- Intersectional environmentalism
- Sensory awareness and observation techniques
- Climate patterns
- Home-scale sustainability
- Ecological entrepreneurship
- Regenerative art and culture

Optional Permaculture Design Certification:

Additional Classes: This encompasses three extra classes of a permaculture design practicum and student presentations to fulfill and surpass the 72-hour requirement to earn a Permaculture Design Certificate. This track covers the essential concepts of the permaculture design system, demonstrated through techniques for sustainable living in densely populated areas. Students will acquire a tool-kit for living in the urban and suburban environment in a way that is both self-reliant and supportive of their community and nature. The curriculum will emphasize skills that contribute to local, community-based resilience and abundance.

What to Expect: Our PDC is a rigorous academic course with standards that exceed those of most college-level classes. Students will be expected to participate regularly in class and complete homework assignments, including readings, observation, and design exercises, as well as a design project presented at the final class meeting. Students are allowed no more than one missed class and absolutely must be present for the final design presentations (6/20). Students who complete the course in a satisfactory manner will receive an internationally-recognized certification in Permaculture Design.

Teachers:

This course will be taught primarily by Robyn Mello, Benjamin Weiss, and Wilson Alvarez, along with a crew of specialized guest instructors.

Robyn Mello is an earth-worshipping designer, writer, organizer, forest gardener, herbalist, builder, musician, and parent. She received her Permaculture Design Certification from Melissa Miles in 2014, Advanced Permaculture Design Certification from Peter Bane and Jono Neiger in 2015, and Permaculture Teacher Certification from Pandora Thomas and Lisa DePiano in 2015. Much of Robyn's permaculture and social justice background has been self-taught and through direct experience, beginning as a teenager but diving into the world most deeply upon graduating from The University of Delaware in 2009. She worked with The Philadelphia Orchard Project to design and train others in biodiverse community orcharding from 2010 through 2017, started a dozen community gardens with a grassroots vacant lot gardening organization she founded called Philly Food Forests from 2010 to 2013, worked as Gardens Manager and Nature Educator for Historic Fair Hill in North Philadelphia from 2011 to 2013, organized the Occupy Vacant Lots campaign with Occupy Philly activists interested in gardening and community organizing from 2011 to 2013, started a small organic farm in Upper Bucks County while living off-the-grid in a tiny house in 2013, worked as an Environmental Justice Researcher with The Delaware Environmental Institute from 2013 to 2015, and redesigned and rehabilitated two neglected homes from 2014 through 2018. She has been fully self-employed through her multifaceted life project and business, Edenspore Design, since late 2017.

Benjamin Weiss is a certified permaculture designer and teacher, activist, herbalist, farmer, musician, and writer from Lancaster, Pennsylvania. Ben studied natural building and permaculture at The Farm Ecovillage Training Center, received

a permaculture teacher certification from <u>CRMPI</u>, studied urban agriculture at <u>Growing Power</u>, and has studied herbalism with Sarah Preston of <u>Radiance</u>, shamanic dreaming techniques with <u>Adhi Moonien Two-Owls</u>, and forest garden design with Dave Jacke. Ben was also the administrator and a long-time volunteer for the Lancaster Coalition for Peace and Justice, and has helped to organize many other initiatives and actions related to racial and environmental justice. Ben has facilitated PDCs and many other classes and workshops, has designed and managed four organic farms, and forages professionally. He owns and manages Susquehanna Apothecary and Urban Edge Farm.

Wilson Alvarez is a certified permaculture designer, an inventor, gardener, skilled tracker, bowyer, nature-awareness instructor, and poet from Lancaster, Pennsylvania. He has studied and taught classes and workshops on biointensive agriculture, regenerative technology, foraging, hunting, trapping and tracking, and wilderness survival. Wilson has created "Rebel Garden Tools," a line of incredibly innovative hand tools for small farms, as well as other inventions such as the "Folk Mug," a handle that turns a mason jar into a travel mug, and "The Multi," a multi-tool wallet. He also founded Folklore Ferments, a small company specializing in the brewing of kombucha. Wilson has a Kamana II certification through Jon Young's Wilderness Awareness School, received his PDC online via Permaculture Visions, and studied applied archaeology at Prescott College with Steve Watts. Wilson manages the woodland rehabilitation at the Horn Farm Center.

Guest Teachers:

- Dale Hendricks & Zach Elfers of Green Light Plants
- Douglas Smith, chief planner of Lancaster City
- William Padilla-Brown of MycoSymbiotics
- Meg Lemieur & Bri Barton of the Water Ways Project
- Jon Darby & Allyson Earl of the Horn Farm Center
- Harrison Rhodes of Rising Locust Farm
- More TBA

Tuition:

Ecological Design (ED) full	\$750	per person
ED Early Bird	\$650	by 12/31/20
ED Group Rate (5 or more people)	\$600	per person
Permaculture Certification (PDC) Full	\$1,000	per person
PDC Early Bird	\$900	by 12/31/20
PDC Group Rate (5 or more people)	\$850	per person

Registration Details:

<u>This course will sell out!</u> To receive the early bird rate, you must pay IN FULL by December 31st, 2020. All other students must pay in full by March 15th, 2021. If there is still space available at that time, we may extend registration until the date of the first class. Nonetheless, pre-registered students must pay in full by March 15th. A registration deposit of \$300 may be submitted at any time in order to hold a place in the class. Once any tuition money is received, it is non-refundable, except in the event of personal medical emergencies or government-mandated lockdowns.

To register: Email Robyn Mello at edensporedesign@gmail.com with your name, email address, phone number, and mailing address and submit registration deposit of at least \$300 to hold your space in the course. Payment options are as follows:

- 1. Venmo to @ edenspore
- 2. PayPal to rojomello@gmail.com via "Friends and Family" option.
- 3. Cash App to \$robynmello
- 4. Direct Deposit via invoice from Edenspore LLC Bank Account (e-mail Robyn to be sent an invoice)
- 5. Check or Money order made out to "Edenspore LLC" and mailed (e-mail Robyn to request mailing address)
- 6. Cash hand-delivered to Robyn Mello or Benjamin Weiss (e-mail Robyn to arrange)

Covid-19 Notes:

This course will be taught entirely outdoors, under cover of a large open-air tent when necessary. Students will be required to wear masks, 6-foot minimum social distancing will be required, and any shared tools or materials will be sanitized between uses. Upon the event that local, state, or national mandates require all in-person outdoor gatherings to be canceled, a \$50 per student administrative fee will be held by facilitators. All other tuition will be refunded.

Group Rate:

Five or more students who sign up as a group may each receive the group rate (\$600 per person for the ecological design course, or \$850 per person for permaculture certification) through March 15th, 2021. To receive this group rate, all registration deposits (\$300 per student) must be submitted either as one payment or as separate payments all received on the same day, and full tuition must be paid by all group members by March 15th, 2021. If any group members drop out and the group number drops below five students, the group rate is void and regular course tuition must be paid in full by all remaining group members.

Scholarships:

We have some limited scholarship funding available. Contact us directly to inquire. We are much more inclined to offer partial scholarships than full scholarships, we expect to see scholarship recipients find ways to fundraise some of their own tuition, and they must be full, active participants in the class.

Preparedness for Class:

Students should come fully prepared to be outdoors for extended periods in varying weather and to participate in hands-on activities, including walks through rough terrain. Not all of the classrooms we'll be in are ADA accessible, but we will happily make any accommodations that we are able in order for students with specific needs to participate. Please notify us of any pertinent allergies or physical limitations before the class begins.

Roughly 30 minutes will be provided during each class session for lunch, as well as periodic short breaks between sessions throughout the day to stretch, make necessary phone calls, use the bathroom, etc. Necessary self-care for personal health and ability to focus throughout classes is encouraged, so long as your self-care is not impeding the learning of others or resulting in excessive missed class time. Students should bring their own food and water.

Prior to the start of the course, each student will be asked to sign "Media Sharing" and "Code of Conduct" forms to ensure that everyone who participates is legally allowed to utilize media captured during the class for further educational or promotional purposes. Please notify the instructors if you plan to miss class, and take responsibility for catching up with any missed course content by reaching out to other students. It is not the responsibility of course facilitators to go over any materials missed in class.

Other things to bring include**:

- notebook
- sketch pad
- writing/drawing utensils
- compass
- camera
- any preferred field guides
- pocket knife or multi-tool
- work gloves
- hand sanitizer
- lap-top/tablet/smart-phone
- bug spray
- sunscreen
- sturdy shoes/boots
- rain gear
- camp chair or seat cushion/pillow

Required Reading:

- 1. Thinking in Systems: A Primer by Donella Meadows
- 2. Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants by Robin Wall Kimmerer
- 3. Permaculture: Principles & Pathways Beyond Sustainability by David Holmgren (For Permaculture Students Only)

Syllabus:

Below is a simplified syllabus. A more detailed syllabus will be sent to students on the first day of class or shortly prior.

April 11* at Urban Edge Farm: Intro to Ecological Design

- Orientation getting to know one another and the land
- Principles of ecology
- Indigenous peoples and ecohistory of the region
- Observation skills
- Reading the landscape
- Early season plant identification

^{**}Students will be notified of any other required materials as the course progresses.

Introduction to Systems Thinking

April 18* at Urban Edge Farm: Intro to Permaculture (10am-6pm)

- Definition, philosophy, and history of permaculture
- Permaculture ethics and principles
- Zone, Sector, and Vector Analysis

April 25 at Horn Farm Center: Intro to Wild Ecosystems

- Deep awareness/observation techniques
- Local/temperate climate ecology
- Basic primitive skills: tracking, fire-making, finding clean water, building a debris hut
- Land stewardship techniques
- Deer management and reforestation
- Financial, legislative, & organizational support for wildlands

May 2 at Urban Edge Farm: Self-care, Social Justice, & Environmental Activism as Ecological Design

- History of environmentalism
- Seasonal/cyclical living & eating
- Introduction to Herbalism
- Community-building strategies
- Design of ecological social movements
- Intersectionality of oppressions and ecological degradation

May 9* at Urban Edge Farm: Intro to Permaculture Design Practicum (10am-6pm)

- Analyzing ecological niches
- Mind-mapping
- Base-mapping by hand and with design software
- Introduction of rubric and assignment for final design project

May 16 at Rising Locust Farm: Rural/Broadacre Ecological Farming

- Soils, soil health, and soil-building
- Silvopasture: livestock and agroforestry
- Water conservation, the hydrologic cycle, riparian ecosystems
- Community governance

Broadacre ecological farm design

May 23 at Green Light Plants Nursery & Homestead: Ecological Micro-Enterprise

- Ecologically-minded homesteading
- Forest gardening
- Bio-char
- Plant propagation
- Integrative ecological design
- Local economies and small-scale industry

May 30 at Urban Edge Farm: Ecological Design for Suburban Landscapes

- Business planning using permaculture
- Twelve forms of capital
- Beekeeping Intro
- Water harvesting, designing landscapes for water retention, berms and swales
- Intensive micro-farm design
- Mycoremediation and mushroom farming

June 6 at Urban Edge Farm: Urban Sustainability & Regenerative Design

- Urban agroforestry
- Urban farming
- Soil remediation
- Financial, legislative, & organizational support for urban agriculture
- Community-building around regenerative ecological systems

June 13 at Urban Edge Farm: Regenerative Culture Design and Wrap-up

- Art and music for ecological and cultural change
- Any modules we didn't yet cover because we ran out of time in previous weeks
- One-on-one project assistance for PDC students

June 20* at Urban Edge Farm: Permaculture Design Presentations (10am-6pm)

*Classes only required for Students seeking Permaculture Design Certification.

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