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**Course Description**

**Short:**
*Have you hugged a tree lately? How about grown one? Photographed one? Drawn one? Written about one? Imagine a semester devoted to connecting two organisms: a person (you) and a tree (not you). Interacting with a single tree, you will explore its individual history, evolutionary history, life cycle, leaves, bark, roots, flowers, cones, and architecture.*

**Complete:**
*To wander about among a vegetation which is new to one is pleasant and instructive. It is the same with familiar plants as with other familiar objects: in the end we cease to think about them at all. But what is seeing without thinking? (Goethe, Italian Journey)*

In an age of environmental destruction and outright murder of our biological brethren, there is something deeply troubling about humanity’s relationship with nature. Technology has left us with mere facsimiles of nature - pixilated abstractions of biodiversity through satellite imagery, decoded strings of DNA – and we, as a species, have become fundamentally disconnected from actual nature and the magnificent organisms with which we share the earth. In this seminar, we will work to understand and give agency to trees as individual organisms, literally rooted in the ground, and evolutionarily rooted in deep time. Topics to be covered include the evolutionary origin of arborescence, human relationships with non-sentient organisms, the case for legal rights for natural objects, reading a twig, the unseen world of roots, and finding human meaning in the longevity in trees. Each student will also work with an individual tree in the living collections of the Arnold Arboretum of Harvard University and observe (see) this organism throughout the entire semester through the creation of images (photography, drawing), journaling, and other forms of representation. The goal of this freshman seminar will be to initiate a personal and lifelong connection with the “other,” the vast and variant organisms with which we share the planet.
Readings: Readings for each class are listed on the syllabus and will be available on the Canvas course site.

Weekly reaction statements: Every week, each student will submit on Canvas by 9:00 am on the day of class a synopsis of what she/he/they discovered in the readings, what she/he/they thought was interesting about the readings and a general reaction to the readings. There is no standard format for these writings. The goal is to develop your abilities to write about ideas and create interesting narratives and queries about the readings. Except for the last class meeting, each reaction statement should be a single-spaced page of text. For the last reaction statement of the semester, you will submit a five-page essay that covers the entirety of the semester and reflects on what you have learned and experienced through the readings and your personal observations of a tree.

Observing a tree: There is no single “right” way to observe a tree or any other organism. But, to take in another organism does require that you begin by pledging to avoid making that organism a mere extension of your self. Over the course of the semester, you can hope that by getting to know another organism you will experience joy, delight, mystery – indeed, a wide range of personal reactions and emotions. After all, you are a sentient being.

So, how to observe? There are two ways of proceeding. First, you need to record and reflect on your tree every week. You can photograph, draw or sketch, write in a journal, record sounds; in essence anything goes. Rest assured that you will get better at all of these approaches to giving standing to your tree as the semester proceeds and you become a better, keener observer. Second, you must decide what you are going to observe. This can vary from week to week and need not be planned. Indeed, it may be best to simply arrive at your tree and let it guide you to a set of observations and personal reflections. There is the whole tree, its architecture and stature. There are the organs of the tree, its seeds and fruits, leaves, buds, bark. There are colors, textures, processes (senescence, for example in the fall; growth and the creation of new organs in the spring and summer). Allow yourself to obsess while you are observing your tree.

To complete each week’s interaction with another organism, in the evening of the day when you have visited your tree, you should devote time to reflection. Look at your photographs, drawings, writing, recordings. Frame your images, refine your writing, resketch. Think. Ponder. Go online and look things up. Think. Ponder.

Weekly lightning presentations: Each week, before class, you will submit one photograph of your tree with a single paragraph giving voice to the tree that is represented in the pixels. We will begin each class by viewing these images along a 90 second to two-minute articulation of what you saw. This should not be extemporized on the spot. Plan your words and organize your thoughts beforehand.

Final student presentations: During the last two meetings, each student will prepare a powerpoint presentation of the semester’s observations and personal reflections on his/her/their tree. This presentation should be ten to fifteen minutes in length.
Academic integrity: Students are expected to abide by the FAS policy on Academic Dishonesty. The policy is available in the student handbook and is located on-line at: http://static.fas.harvard.edu/registrar/ugrad_handbook/current/chapter2/academic_dishonesty.htm

Accommodations for students with disabilities: Students needing academic adjustments or accommodations because of a documented disability must present their Faculty Letter from the Accessible Education Office (AEO) and speak with the professor by the end of the second week of the term, September 13. Failure to do so may result in the Course Head's inability to respond in a timely manner. All discussions will remain confidential, although Faculty are invited to contact AEO to discuss appropriate implementation.

Class locations: All fall semester 2020 classes at Harvard College will be taught online. Links to Zoom meetings will be available on Canvas.

Weekly meeting time: 3:00–5:45 PM on Mondays
Class Schedule

Week 1 – September 2, 2020 (Wednesday, with Monday schedule)

Topic: Course overview; Introduction of the teaching team; What is a tree? Can the essence of a tree be defined?

Meet: Online


At the Arboretum (digital) experience: Planting a tree; propagation; and the miracle of a tree seed

September 7, University holiday

Week 2 – September 14

Topic: Birth of the concept of an arboretum; birth of the Arnold Arboretum; a virtual walk on the grounds

Meet: Online


Loudon, J., & Strutt, J. (1840) The Derby arboretum containing a catalogue of the trees and shrubs included in it, a description of the grounds and directions for their management, a copy of the address delivered when it was presented to the town of Derby, by its founder, Joseph Strutt, esq., and an account of the ceremonies which took place when it was opened to the public, on Sept. 16, 1840. London: Longman, Orme, Brown, Green & Longmans. Pages 7–10 & 71-97.

Submit: One-page reaction statement to reading
Week 3 – September 21

Topic: The origin of arborescence: an evolutionary historical perspective

Meet: Online


Submit: One-page reaction statement to reading

Week 4 – September 28

Topic: Intertwining trees and humans

Meet: Online


Submit: One-page reaction statement to reading
**Week 5 – October 5**

**Topic:** Should trees have legal standing?

**Meet:** Online


**Submit:** One-page reaction statement to reading

**October 12, University holiday**

**Week 6 – October 19**

**Topic:** Biogeography: Global migrations of temperate trees: Eastern North America is filled with botanical emigrants from Asia

**Meet:** Online

**Read:** Selected correspondence between Asa Gray and Charles Darwin on disjuncts.


**Submit:** One-page reaction statement to reading
**Week 7 – October 26**

**Topic:** The inner world of buds: Reading a twig and comprehending tree longevity

**Meet:** Online

**Read:**


**Submit:** One-page reaction statement to reading

**At the Arboretum (digital) experience:** Dissecting buds and reading twigs

**Week 8 – November 2**

**Topic:** Tree rings, bark, and recording the past

**Meet:** Online

**Read:**


Trouet, V. (2020). And the tree was happy (chapter 4). In *Tree Story.* Johns Hopkins University Press.

**Submit:** One-page reaction statement to reading
**Week 9 – November 9**

**Topic:** Roots, the unseen half (architecture and symbioses)

**Meet:** Online


**Submit:** One-page reaction statement to reading

**At the Arboretum (digital) experience:** Excavating a root system with an air spade  
(also: [airspading on YouTube](#))

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**Week 10 – November 16**

**Topic:** Tree fecundity, seeing the trees through the forest

**Meet:** Online


**Submit:** One-page reaction statement to reading
Week 11 – November 23
Topic: What is a tree? Student presentations
Meet: Online

Week 12 – November 30
Topic: What is a tree? Student presentations
Meet: Online
Submit: Five-page reflection on a tree