PARTNER WITH TREES (BIO 20Q) Spring 2022 Preliminary syllabus (some details may change)



<u>Instructor</u>: Devaki Bhaya <u>dbhaya@stanford.edu</u> (bhayalab.org) Campus Walk Lead: Sairus PateL sairus@stanford.edu CDAs: Vince Pane vpane@stanford.edu, Alexandra (Sasha) Moore amoore5@stanford.edu Course Observer/Photographer: Evan Paris

exploreintrosems.stanford.edu/sophomore/partner-trees

We're surrounded by magnificent trees on the Stanford campus. This course is an invitation to pause, marvel at and learn about trees! We will explore several aspects of these natural wonders. Accompanied by quest lecturers and experts, we will wind our way around campus, using Ron Bracewell's unique Trees of Stanford and its Environs as a quide. Our walks will let you discover, appreciate, and recognize unique tree species on campus and even how to safely climb trees, helping you gain a higher perspective and find your inner child. We will learn the fascinating science and ecology of trees, their importance in sustaining the Earth's environment and how indigenous peoples have protected trees. Alonaside, we'll explore how trees have inspired poetry, song, fiction, photography, and painting. The course will introduce you to tree-enthusiasts from around the world. You will develop a short project related to trees, based on your own interests in art/literature, science, or the environment. Ideally, we want you to walk away with an appreciation for the importance and majesty of trees or to agree with Thoreau who wrote "I took a walk in the woods and came out taller than the trees."

explorecourses.stanford.edu

BIO 20Q | 3 units | UG Reqs: None | Class # 33476 | Section 01 | Grading: Letter or Credit/No Credit | ISS

| Session: 2021-2022 Spring 1 | In Person | Students enrolled: 15 / 16

03/28/2022 - 06/01/2022 Thu 1:30 PM - 4:30 PM at STLC105 with Bhaya, D. (PI)

Instructors: Bhaya, D. (PI)

Notes: Introductory Seminar. Preference to sophomores; first-year students admitted if space is available.

Advance sign-up process and deadlines at http://introsems.stanford.edu

Grading: Assignments, class engagement and attendance (50%); Project (50%) plans, ideas and themes will be discussed after Week 2.

Students are expected to attend every class and be dressed and ready to move on time.

Life happens, please let at least 2 members of the teaching team know if you have to miss class and we will excuse you. For every unexcused absence a Student's grade will be dropped one letter (eg. A to B).

This is a participatory class, so we encourage you to ask questions, get your hands dirty, and get to know each other!

WEEK 1 (31 March):

- <u>Devaki</u>: Introductions of students, instructors, CDAs and others.
- <u>Sasha</u>: Icebreaker and questions
- <u>Devaki</u>: Introduction to the class plan, philosophy and expectations (including grading).
- Describe how Readings, resources and other material will be made available.
- Since the class has several dimensions, opportunities and extracurricular activities that arise during the quarter will be posted (Slack or Canvas).
- <u>Sairus</u>: Description of walk highlights based on Ron Bracewell's 'Trees of Stanford'
- Sairus, Vince, Sasha: Walk around main Quad with highlights of specific features

WEEK 2 (7 April):

Guest speaker: Katie Holten (https://www.katieholten.com/)

Katie Holten is an author, artist and an environmental activist among other things! She is from Ireland and is visiting the US, so we are lucky to have her come to talk. She will discuss her current areas of work and how they fit in with our class themes.

We will follow that with a walk to the area around the Cantor museum and/or Papua New Guinea sculptures area.

Readings: TBD

WEEK 3 (14 April)

Field trip to the **Djerassi Center, Woodside** (djerassi.org). This will be a guided hike through the Djerassi property which has six distinct habitat types.

Details at

https://djerassi.org/land/environmental-stewardship/

Details of meeting point for buses and timings TBD.

Please remember: Bring at least 1 liter of water and a snack. Wear comfortable hiking shoes/sneakers. Wear sunscreen/sun protection and tick protection. The hike is strenuous and covers 3.5 miles in 3 hours. It goes up and down steep hills on dirt paths and will return at 4pm. IMPORTANT! Each participant must fill out our waiver form prior to arriving at the property. The form can be found here: Djerassi Hike Liability Waiver.

WEEK 4 (21 April)

Field trip to the **California Academy of Sciences**, San Francisco to visit the Tropical Rainforest exhibit (https://www.calacademy.org/exhibits/osher-rainforest). It will be introduced by **Shannon Bennett**, Chief of Science. The California Academy of Sciences is a research institute and natural history museum in San Francisco, California, that is among the largest museums of natural history in the world. <u>Details of meeting point for buses and timings TBD</u>.

WEEK 5 (28 April)

Field trip to Stanford University's **Jasper Ridge Biological Preserve** (JRBP), about five miles southwest of the main campus. The preserve provides a natural laboratory for researchers from all over the world, and we will explore the area with a docent as well as visit the herbarium. We will also discuss the history of the park. https://jrbp.stanford.edu/

Details of meeting point for buses and timings TBD.

WEEK 6 (5 May)

We will meet at the **O'Donohue Family Educational Farm** and be introduced to the various activities related to sustainable agriculture. We will be guided by Patrick Archie (Director) and participate in a tree-planting event. A small hands-on science project is planned, if we can arrange a lab etc. If not, we will plan alternate activities.

https://earth.stanford.edu/farm/about#gs.v4fovw

WEEK 7 (12 May)

Noah Rosenberg, Department of Biology will give us a lecture on the structure of trees and questions that intrigue/inspire him. We will follow this with a walk around specific parts of campus. **Conrad Schmidt** will join the walk and show us additional tree-related activities.

WEEK 8 (19 May)

TBD: Author and naturalist **Obi Kaufmann** will visit us. https://coyoteandthunder.com/ He is an inspiring writer, illustrator and the author of *The California Field Atlas*. This truly unique book features hundreds of his watercolor paintings of maps, wildlife, and other aspects of nature. Kaufmann is also a conservationist. This will be followed by a walk to the Arizona garden and the area around the Mausoleum.

WEEK 9 (26 May)

Last class before presentations: We are currently planning lectures and activities around the theme of Trees on campus, eg. the iconic Oaks. If feasible, we may be able to organize a field trip to the area surrounding the **Apple campus in Cupertino** led by **Dave Muffly**, which will be an introduction to the art and science of urban landscaping, oak plantings etc.

WEEK 10 (2 June)

Student presentations and final get-together.