



Sonoma Ecology Center

2022 UC California Naturalist Course Syllabus

Welcome and congratulations on your enrollment in the Spring 2022 Sugarloaf Ridge State Park California Naturalist Program facilitated by Sonoma Ecology Center.

Please contact Tony@sonomaecologycenter.org if you have any problems with the registration process. Full refunds, minus a \$50 processing fee, are permitted until March 9.

Contact Information: Tony Passantino email: Tony@sonomaecologycenter.org; & Daniel Levitis email: Danl@sonomaecologycenter.org

Lead Instructor: Tony Passantino, Education Program Manager—BA in Geography/Environmental Studies, UCLA

Tony Passantino has extensive knowledge of watershed dynamics and the local ecology of Sugarloaf Ridge State Park through his coursework in Environmental Studies at UCLA, and significant experience in leading place-based education curricula since 2012 at Sugarloaf Ridge State Park. He is certified through Project WET, Project WILD and Project Learning Tree, an Aldo Leopold Foundation graduate and Backcountry Leadership instructor through Bay Area Wilderness Training. He has worked on watershed education and conservation for the internationally focused nonprofit, Tahoe-Baikal Institute, and has worked for AmeriCorps at Lake Tahoe on sediment erosion and best management practices. Tony has a talent for leading groups in field-based learning projects which he brings to his work with students on field trips, summer camps, and classroom programs. He is an avid trail runner and backpacker. He is recently returned from a 3 month sabbatical, guiding backpacking trips through the Western Highlands of Guatemala. At Sonoma Ecology Center, he leads an education team providing free lessons to Sonoma Valley elementary school classes, oversees the Teen EnviroLeaders program and serves as the Sugarloaf Ridge State Park Education Coordinator.

Support Staff/NEST Coordinator: Daniel Levitis, Community Science Coordinator- Ph.D. in Integrative Biology, UC Berkeley

Dr. Daniel Levitis is excited to bring people and science together. He is passionate about education, community science, science communication, diversifying the scientific workforce, nature photography, and conservation. His hobbies include wildlife photography, hiking, volunteering, and improvisational carpentry. He has taught university

courses in evolution, conservation biology, biodemography, zoology, and ecology, and published original research, with students as co-authors, in top international journals.

Directions to Robert Ferguson Observatory

2605 Adobe Canyon Road, Kenwood, CA 95452-9065

Sugarloaf Park (707)833-5712 Robert Ferguson Observatory (707) 833-6979

From Highway 12 east of Santa Rosa, turn on Adobe Canyon Road toward Sugarloaf Ridge State Park. Follow the road up the canyon. From the Park's entrance kiosk, proceed straight up the road, following the signs to the observatory. Please drive slowly—hikers and animals abound!

Just past the horse corrals, you will come to a green gate. Drive past the gate, if it's not open then park in the gravel area between the corrals and the green gate, then walk past the gate up the road a short distance to the observatory.

What to Wear: Warm layers you don't mind getting dirty, gloves and hats. Wool socks and sturdy shoes are helpful for the morning field trips.

Course Description:

The California Naturalist Program seeks to foster a committed corps of volunteer naturalists and citizen scientists trained and ready to take an active role in natural resource conservation, education, and restoration. The California Naturalist course will introduce you to the wonders of our local ecology and engage you in the stewardship of California's natural communities. The course will combine a science curriculum with guest lecturers, field trips and project-based learning to immerse you in the natural world of the Inner ridge of the Mayacama Mountains. By the end of this course, participants will be able to:

- Understand what it means to be a naturalist
- Understand the abiotic, biotic and cultural factors that make California and the Sonoma Valley natural history and ecology
- Demonstrate skills in making and recording natural history observations in a field notebook and on iNaturalist.org
- Demonstrate skills in communicating and interpreting natural resource information · Apply knowledge of Sonoma Valley ecosystems to local and global environmental issues.

Components of the Course:

Class & Readings

The class will be held weekly on Wednesday nights from 6:00pm - 8:30pm via Zoom virtual format.

In preparation for lectures, all assigned readings and corresponding homework assignments from the *California Naturalist Handbook* should be completed before each class where they appear on the syllabus. Evening classes will be a mix of activities with guest lecturers, classroom lecture, discussion, and a small snack break.

Field Trips

Saturday Field trips are TENTATIVELY scheduled for March 26, April 9, April 23 and May 7. Each field trip will run from approximately 8:00am -12:00pm, with the exception of May 7, which will run from 5:00am - 8:00am and will include an optional overnight camping trip on Friday, May 6.

NOTE There is a mandatory California Naturalist Meeting on Friday, May 6 from 6:00pm - 8:30pm regardless of whether you choose to camp out. Participants may not bring guests or children on any California Naturalist course field trips.

What to bring on a Field Trip:

- Sturdy walking shoes
- Field Journal
- Dress in layers (cold in the morning but heats up in the afternoon)
- Shade hat
- Sunscreen
- Water bottle
- Cell phone for iNaturalist Program
- Lunch and snacks
- Daypack
- Personal medicine
- Hiking Poles (optional)
- Binoculars (optional, recommend)
- Field guides (optional)

Graduation Day

Graduation/Capstone day will be on **FRIDAY, MAY 6, 6:00pm - 8:30pm** in person at the Sugarloaf Ridge State Park Group Campground.

Field Notebooks

All participants are required to keep a field notebook during the course. Field notebooks may be checked by the instructor periodically during the class or at the end. We will be using these notebooks during class, on field trips and hopefully on your own time. Keeping a field notebook is one of the best ways of fostering continued learning and getting to know a place intimately. Do not worry about getting anything fancy; a simple blank or lined notebook/journal will suffice.

iNaturalist

Over the course of the California Naturalist class, each participant will be responsible for registering for an iNaturalist account (<http://www.inaturalist.org/>) and adding at least 2 observations per week. We will go over the iNaturalist web tool on the first day of class, but you are encouraged to download the free app “iNaturalist” on your smartphone ahead of time.

Capstone Project

Participants are required to complete a volunteer service project in one of four areas: Stewardship, Education/Interpretation, Community Science, or Program Support. The Capstone Project provides an opportunity for participants to integrate the in-class material with an applied work project that is done in conjunction with a local natural resource agency or organization. Participants are encouraged to work in teams when appropriate, and in the final class will deliver individual or group presentations on the projects. Presentations will be 5 minutes long per person (so 15 minutes for a 3 person group). The instructor will provide a Capstone Project proposal form, list of potential project ideas, and feedback as necessary. Participants who would like to propose a Capstone Project that is not on the list will have an opportunity to do so.

Attendance

Participants must attend all evening classes. If an evening class is missed, the participant will be expected to complete make-up activities on their own time at the direction of the instructor. All lectures have been recorded through 2020 and are available as make-up material. Please consult your instructor if you are going to miss a class for access to the video content. Field trips will be flexible this year given on-going public health circumstances. You are encouraged to attend our in-person trips but options for independent field trips are available for those who need them.

Homework

Reading is assigned for each class meeting (check the class schedule below), based on the topic to be covered that day. Participants are expected to read the chapters assigned for that day before class meeting times, so that the materials are more relevant as they are presented.

Volunteer management system (VMS):

Participants will be provided an online account to track their volunteer hours, including hours spent on their Capstone Project. Tracking volunteer hours is an essential way to prove the need and impact of a program like the California Naturalist Program.

Other Information

Eating during class is allowed. Each individual will be responsible for their own food and drink.

Required Items:

1. *The California Naturalist Handbook* by Greg de Nevers, Deborah Stanger Edelman and Adina Merenlender
2. *A field notebook for nature observations and drawings, pencil(s).*
3. *Suggested but Not Required: hand lens (10x), binoculars, camera*

Recommended Supplemental Reading:

1. *Secrets of the Oak Woodlands: Plants and Animals Among California's*, Kate Marianchild Press: 2015
2. *The Laws Guide to Nature Drawing and Journaling, Laws, Heyday Press, 2016*
3. *Laws Pocket Guide Set to San Francisco Bay Area, Laws, Heyday Press, 2014*
4. *An Island called California*, Bakker, E., University of California Press: 1984
5. *A Natural History of California*, Schoenherr, A.A., University of California Press: 1992
6. *Introduction to California Plant Life* (California Natural History Guides, 69), Ornduff et al., UC Press: 2003
7. *Trees and Shrubs of California* (Calif. Natural History Guides 62), Stuart, Sawyer, UC Press: 2001 *California Insects*, Powell and Hogue, University of California Press: 1980
8. *Mammals of California* (California Natural History Guides, 66), Jameson and Peters, UC Press: 2004

9. *The Sibley Field Guide to Birds of Western North America*, Sibley, D.A., Knopf Publishing: 2003

Class Schedule:

All evening classes are scheduled from 6:00pm - 8:30pm and all Saturday Field Trips are from 8:00am - 12:00pm with the exception of May 7 (5:00am - 8:00am).

March 16: CA Natural Resources, Communication, and Journaling; Nuts and Bolts of the Program *Guest speaker:* Tony Passantino, Education Program Manager

Reading: Chapter 1 California Natural History & Role of Naturalists

March 23: Citizen Science and Interpretation

Guest speakers: Dan Levitis, Community Science Coordinator

Reading: Chapter 8, Citizen Science

March 26: Field Trip- Sugarloaf Ridge State Park, Dan Levitis Ph.d, Community Science Coordinator & Tony Passantino, Education Program Manager

March 30: Geology, Soils & Climate

Guest speaker: TBD

Reading: Chapter 2 Geology, Climate and Soils

April 6: Water

Guest speaker: Steve Lee, Research Director for Sonoma Ecology Center, UCLA

April 9: Field Trip- Sugarloaf Ridge State Park, Lead instructor TBD

April 13: Forest and Woodland Resources

Guest speaker: TBD

Reading: Chapter 5 Forest and Woodland resources

April 20: Plants

Guest speaker: David Herlocker, Retired Naturalist Marin Open Space District

Reading: Chapter 4 Plants

April 23: Field Trip- Van Hoosear Wildflower Preserve with Dan Levitis, SEC & Tony Passantino, Education Program Manager

April 27: Animals

Guest speakers: David Herlocker, Retired Naturalist for Marin Open Space

May 4: Energy and Global Environmental Challenges

Guest speaker: Caitlin Cornwall, Sustainable Sonoma

Reading: Chapter 7 Energy and Global Environmental Issue

FRIDAY, May 6: Capstone Presentations & Optional Campout (6:00-8:30pm)

Student Capstone presentations with option campout

May 7: Field Trip **SPECIAL TIME** (5:00am - 8:00am) - Sugarloaf Ridge State Park with Dawn Chorus and Breakfast talk with Bernie Krause