



**Sonoma Ecology Center
2019 UC California Naturalist Course Syllabus**



Welcome and congratulations for being a part of the Spring 2019 Sugarloaf Ridge State Park California Naturalist Program facilitated by Sonoma Ecology Center.

Please contact Tony@sonomaecologycenter.org/707-996-0712 x124 if you have any problems with the registration process. Full refunds, minus a \$50 processing fee, permitted until March 5th.

Lead Instructor: Tony Passantino email: Tony@sonomaecologycenter.org, (707)996-0712x124; Caitlin Cornwall email Caitlin@sonomaecologycenter.org, (707)996-0712x105

Lead Educator: Tony Passantino, Education Coordinator—*BA in Geography/Environmental Studies, UCLA*

Tony Passantino has extensive knowledge of watershed dynamics and the local ecology of Sugarloaf Park through his coursework in Environmental Studies at UCLA, and significant experience in leading place-based education curricula at the park for the last 6 years at Sugarloaf Park. He is a 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 an international non-profit focused Tahoe-Baikal Institute, and 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, recently returning from a 3-month sabbatical, guiding backpacking trips through the Western Highlands of Guatemala. At Sonoma Ecology Center, he teaches lessons to Sonoma Valley elementary school classes, oversees the Teen EnviroLeaders program and is the Sugarloaf Park Education Coordinator.

Support Staff: Caitlin Cornwall, Research Program Director, B.A. Ecology and Integrative Biology, UC Berkeley/ M.S. Plant Biology & Ecology, ASU

Caitlin has been with Sonoma Ecology Center since 1998. Her expertise includes indicator-based reporting systems, climate adaptation, technical partnerships for local-scale multiple stakeholders, multi-benefit water management strategy, wildlife habitat connectivity, and riparian. Her graduate coursework was in statistics, fluvial geomorphology, soils, plant ecology, and study design. Caitlin is also

on the Climate Bay Area adaptation expert advisory group, San Francisco Bay Joint Policy Committee (Association of Bay Area Governments, Metropolitan Transportation Commission, and Bay Conservation & Development Commission.

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, gloves and hats. Wool socks and sturdy shoes are helpful. As we get later into the season the room may be cold before the heater kicks in and there may be times that we'll be outside for part of the lecture series. Bring a small flashlight for the evening walks back to your car.

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 Thursdays (with exception of Weds March 20) from 6-8:30pm, starting March 14 and ending May 16, 2019.

Class will be held at the Robert Ferguson Observatory, 2605 Adobe Canyon Road, Kenwood CA 95476 unless otherwise noted. In preparation for lectures, all assigned readings and corresponding “Homeplay” 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. Please dress appropriately for the class as we may be outside for certain lectures.

Field Trips

Saturday Field trips will be held on March 30, April 13, April 20, May 4 and May 11. Each fieldtrip will run from approximately 8:30am – 1:30pm. We will meet at a designated area that will be identified during the previous class. Participants may not bring guests or children on any field trips.

What to bring on the Fieldtrip:

- 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 Thursday, May 16 at Robert Ferguson and the group campground adjacent to it. **Family and friends are welcome to attend the final day.**

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.

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 3 observations to the established California Naturalist project per week. We will go over the iNaturalist web tool on the first day of class.

Capstone Project

Participants are required to complete a volunteer service project in one of four areas: Stewardship, Education/Interpretation, Citizen Science and 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 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. Please talk to me if you are going to miss a class. Only one evening class session can be missed. Field trip should not be missed as there is no way that a missed field trip cannot be made up.

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 the class meeting times, so that the materials are more relevant as they are presented.

Volunteer management system (VMS):

Participants will be provided an on-line account to track their volunteer hours, including hours spent on their Capstone project. Tracking volunteer hours is an essential way to prove 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. An e-mail account
3. A field notebook for nature observations and drawings, pencil(s). This should be on "all weather" paper such as a Rite in the Rain note book (4 5/8" x 7" minimum is recommended).
4. Suggested but Not Required: hand lens (10x), binoculars, camera

Recommended supplemental reading:

Secrets of the Oak Woodlands: Plants and Animals Among California's, Kate Marianchild Press: 2015

The Laws Guide to Nature Drawing and Journaling, Laws, Heyday Press, 2016

Laws Pocket Guide Set to San Francisco Bay Area, Laws, Heyday Press, 2014

An Island called California, Bakker, E., University of California Press: 1984

A Natural History of California, Schoenherr, A.A., University of California Press: 1992
Introduction to California Plant Life (California Natural History Guides, 69), Ornduff et al., UC Press: 2003

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

Mammals of California (California Natural History Guides, 66), Jameson and Peters, UC Press: 2004

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

Class Schedule:

All evening classes are scheduled from 6:00-8:30pm and all Saturday Fieldtrips are from 8:30-1:30pm with the exception of May 11 (5:15-7:30am).

March 14: CA Natural Resources, Communication, and Journaling

Guest speaker: Tony Passantino, Education Coordinator, Sonoma Ecology Center & Jolleen Ossello, CA State Parks Interpreter

Reading: Chapter 1 California Natural History & Role of Naturalists

(Wednesday) March 20: Citizen Science and Interpretation

Guest speakers: Bill Miller, Environmental Scientist, CA State Parks &, Alison Young, Cal Academy of Science

Reading: Chapter 8, Citizen Science

March 28: Geology, Soils & Climate

Guest speaker: Scott Lawyer, Field Operations Manager and Geologist, Stewards of the Coast and Redwoods

Reading: Chapter 2 Geology, Climate and Soils

March 30: **Field Trip**- Sugarloaf Ridge State Park, Interpretation of Fire Recovery w/Caitlin Cornwall, SEC Policy and Planner Project Manager, North Bay Climate Adaptation Initiative lead

April 4: Water

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

- Optional Star Party with Observatory Staff after class!

April 11: Plants

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

Reading: Chapter 4 Plants

April 13: **Field Trip**- Van Hooser Wildflower Preserve with Caitlin Cornwall, SEC

April 18: Forest and Woodland Resources

Guest speaker: Jason Mills, Restoration Manager Sonoma Ecology Center

Reading: Chapter 5 Forest and Woodland resources

April 20: **Fieldtrip**-TBD, Earth Day Cal Nat Stewardship Project

Lead by SEC Staff

April 25: Animals

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

May 2: History of Sonoma Valley Place and People

Guest Speakers: Retired CA State Park retired state archeologist, Breck Parkman

May 4: **Field trip**- Sugarloaf Ridge State Park, Animal Walk with David Herlocker

May 9: Energy and Global Environmental Challenges

Guest speaker: Bernie Krause, Soundscape Ecologist & Caitlin Cornwall

Reading: Chapter 7 Energy and Global Environmental Issue

May 11: **Fieldtrip SPECIAL TIME (5:15-7:30am)**- Sugarloaf Ridge State Park with Bernie Krause

May 16: Capstone project presentations