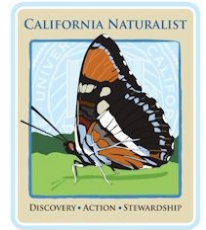




Certified California Naturalist Training Program

Syllabus, 10-Week Course

Berryessa Snow Mountain National Monument Region



Instructor Team and Contact information:

1. Bill Grabert, Instructor, bgrabert@tuleyome.org, 530-350-2599 or 530-753-6997
2. Mary K. Hanson, Instructor, mhanson@tuleyome.org, 530-350-2599 or 916-717-9411

Websites and Links:

- Tuleyome Website: <http://tuleyome.org/projects/calnat/>
- Tuleyome's CalNat Facebook Group: <https://www.facebook.com/groups/TuleyomeNat/>
- Tuleyome's iNaturalist Project: <http://www.inaturalist.org/projects/tuleyome-s-species-identification-portal>
- UC CalNat Facebook Page: <https://www.facebook.com/CANaturalist/?fref=ts>
- UC CalNat Website: <http://calnat.ucanr.edu/>
- UC CalNat Volunteer Portal: <https://ucanr.edu/portal/login/universallogin.cfm?appname=vms>

Textbooks:

- *California Naturalist Handbook* (**Required**), ISBN: 9780520274808, <http://www.ucpress.edu/book.php?isbn=9780520274808>
- *A Species Guide for the Berryessa Snow Mountain Region* (not required), 9781312746398, <http://www.lulu.com/shop/compiled-by-mary-k-hanson-for-tuleyome/a-species-guide-for-the-berryessa-snow-mountain-region/paperback/product-22303444.html>

Location:

Woodland Public Library, 250 First Street, Woodland, CA 95695

Parking is in the rear of the facility on the far RIGHT side (as you enter the parking lot). Do not park in the "2-hour" spaces.

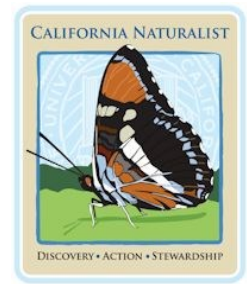
Time of Classes:

Fridays, 2:00 pm to 6:00 pm (every Friday from February 2, 2018 through April 6, 2018). The last hour of the class is an "open hour", and optional for students. More information about attendance during the open hours will be discussed during the first class. See pages 5 through 9 for more information.

Field Trips: Three different Saturdays, approximately 7:00 am to 3:00 pm. See pages 5 through 9 for details



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Course Description:

This California Naturalist class will introduce you to the wonders of the bio diversity unique ecology of our region, and engage you in the stewardship of California natural communities. The course will utilize a combination of science curriculum, guest lecturers, species-identification modules, field trips and project-based learning to immerse you in the landscapes of the Berryessa Snow Mountain National Monument region.

UC Naturalist Program Goals:

This course is provided in partnership with the University of California, and its goals are 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;
- Provide training, in collaboration with local partnering institutions, for adult environmental stewards through adaptable outdoor and in-class curriculum that can be easily applied in a variety of settings;
- Engage adults in interactive learning that provides them with scientific literacy and critical thinking skills including:
 - Science-based curriculum
 - Hands-on learning
 - Communication training
 - Community service

Student Learning Outcomes:

By the end of this course, participants should be able to:

- Understand what it means to be a naturalist
- Integrate knowledge about the interconnectedness of the ecosystems, watersheds, geology, biology, natural and cultural history, and climate change on the Berryessa Snow Mountain National Monument region
- Demonstrate skills in making and recording observations in a naturalist's field notebook
- Correctly identify common plant and animal species in the Berryessa Snow Mountain National Monument region
- Maintain a working vocabulary of terms most often used by naturalists

Course Components:

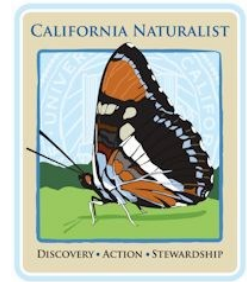
Participants are expected to actively engage in every component of this course. Our coursework will include the following:

Class and Readings: Our course will consist of 10 four-hour classes and three field trips. (The last hour of the class is an "open hour", and optional for students. More information about attendance during the open hours will be discussed during the first class.) All but the first and last class will consist of:

- Teaching based on required reading, including PowerPoint slide show reviews; break-out groups to discuss topics from the chapter; etc.



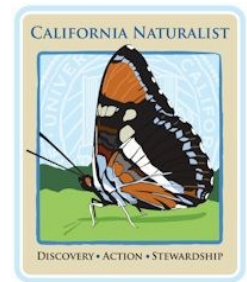
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- A presentation by a guest speaker which may include a lecture and/or an interactive demonstration. Each guest speaker will also provide students with information on **volunteer opportunities** in their field.
- An “open hour” during which we will assist students with questions about the readings, time for species identification, etc.
- **Field Trips:** We will be offering a variety of field trips that will be held outside of the classroom and will usually take an entire day. Generally speaking, field trips will take place on a weekend. (*See the Course Outline for more detailed information about dates and times.*) Since the Berryessa Snow Mountain National Monument covers seven counties and over 100 miles of varying landscapes, the drives to/from locations for these field trips may be extensive.
 - We will be offering **three (3) field trips** during this course. Participants **may miss one field trip**, but if a field trip is missed arrangements must be made with the instructor / coordinator for an alternative exercise that will count toward the course study.
 - Meeting places will be arranged for each field trip.
 - Students are expected to arrange for their own meals, water and carpooling (if necessary) for these trips.
 - Tuleyome will supply things like digital cameras, binoculars, birding scopes, hand lenses, and other such equipment as needed.
- **Field Notebooks:** Participants are required to purchase, keep, and maintain a notebook in which they record their observations in the field. A field notebook is one of the best ways of fostering learning and getting to know an area intimately. We will be periodically sharing our notebooks throughout the course, so all students are expected to keep adding to and maintaining their notebooks throughout the length of the course.
 - Field notebooks can be as simple or as elaborate as the student wants to make them. They can be anything from a simple wire-bound notebook, to an artist’s sketchbook or a hardbound journal.
 - Students may also take notes in the field and then translate the notes, drawings and photos they take into a digital field notebook (that would then be printed out and shared with the class.)
- **iNaturalist:** Participants will learn how to use the iNaturalist app (for cellphones and/or PCs), and will be expected to add **at least five (5) observations** into the Tuleyome project during the course of the class. Tuleyome’s iNaturalist group page is located at:
 - <https://www.inaturalist.org/projects/tuleyome-species-identification>.
- **Nature Table:** Tuleyome will be providing space for a “nature table” onto which, each week, the instructors, coordinators and students will share photos, field journals, or simple specimens of the flora and fauna in the region. The nature table’s purpose is to help provide some indoor hands-on learning opportunities. More information about the table will be discussed during the first class.
- **Capstone Project:** As a requirement of this course, students will complete a volunteer service project with some sort of “deliverable” that will act as a kind of bridge between what was learned in class and what can be implemented outside of class. Students can work by themselves or in teams (of no more than 3 people) for this project, and will present their deliverable to the class on the last day of the course. Tuleyome will provide students with a list of possible subjects for your capstone project or you can come up with one yourself. All capstones must fit under at least one of the following categories:
 - Stewardship



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- Education / Interpretation
 - Citizen Science
 - Program Support
- **Volunteering:** Participants are encouraged to complete at least forty (40) hours of volunteer service each year in order to maintain their certification. Pins are awarded each year for participants who meet this goal, and the pins differ from year to year.
 - Volunteer activities need to relate to California's natural or environmental history, occur in California, be sponsored by an organization, and be UNPAID.
 - Your 8-hour capstone project will count toward your first year's volunteer hours.
 - You will log these hours into the UC Volunteer Portal at:
 - <https://ucanr.edu/portal/login/universallogin.cfm?appname=vms>.
 - Wait for the portal to be set up for you.
 - You will be provided with a user name and password after the start of the coursework.
 - As with the capstone, all volunteer hours must fit under at least one of the following categories:
 - Stewardship
 - Education / Interpretation
 - Citizen Science
 - Program Support

Attendance: Participants must complete a minimum of **forty (40) hours of instruction** during the course. Only **one (1) class session can be missed**, and make-up work assigned by the instructor / coordinator must be completed before the next class on the participant's own time. As mentioned previously, we will be offering **three (3) field trips** during this course. Participants **may miss one (1) field trip**, but if a field trip is missed arrangements must be made with the instructor / coordinator for an alternative exercise that will count toward the course study. Our instruction modules are set up so if the student completes all of the indoor classwork and all of the field trips, the student will accumulate 50+ hours of training; more than is mandated by the university's program.

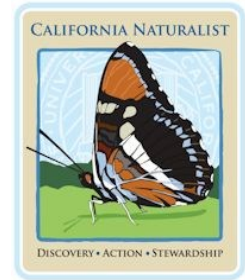
Homework: Homework will be assigned each week and will generally consist of reading the required chapters in the textbook, journal entries, and/or iNaturalist entries. There may also be some research assignments and/or questions for students to answer.

Tests: To help the instructors gauge the learning retention of the students, a test may be given periodically on the vocabulary, topics and/or species identification discussed during the previous week. Tests may be written or verbal, or include a hands-on activity. Students who miss a class (and thereby misses the test given that day) are required to complete an alternative assignment provided by the instructors.

Cancellation Policy: Once the registration fee has been paid, no refunds are given for any reason (except in the unlikely event that Tuleyome has to cancel the class).



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COURSE OUTLINE

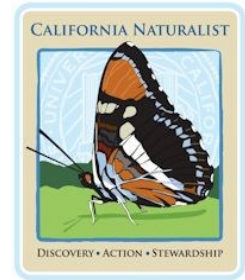
Location of Classes: Woodland Public Library, 250 First Street, Woodland, CA 95695

Time of Classes: 2:00 pm to 6:00 pm (The last hour of the class is an “open hour”, and optional for students. More information about attendance during the open hours will be discussed during the first class.)

Week #	Date	Course Topic / Speakers	Homework Assignments
1	Friday, February 2, 2018	<ul style="list-style-type: none"> • <i>Introduction to California’s Natural Resources and the California Naturalist Program</i> • Orientation, course overview, paperwork completion • Explanation of the “nature table” • Guest Speaker(s): Sara Husby (Tuleyome), Gregg Ira (CalNat) 	<ul style="list-style-type: none"> • Purchase a field journal and make at least 1 entry • Read Chapter 8: “<i>Interpretation, Collaboration and Citizen Science</i>” in the text book
2	Friday, February 9, 2018	<ul style="list-style-type: none"> • <i>Interpretation, Collaboration & Citizen Science</i> • Field Journaling • Using iNaturalist • Capstone Project • Volunteer Hour tracking portal, UC • Guest Speaker: Petrea Marchand, Yolo Habitat Conservancy • “Open Hour”, species identification, one-on-one with an instructor, etc. 	<ul style="list-style-type: none"> • Make at least 1 entry in your field journal • Install iNaturalist on your phone and/or PC • Make at least 1 entry into iNaturalist • Read Chapter 2: “<i>Geology, Climate and Soils</i>” in the textbook
	Saturday, February 10, 2018	<p>Field Trip #1 <i>Location: Sacramento National Wildlife Refuge</i> <i>Meeting Place:</i> We will meet in the parking lot kitty-corner from the Tuleyome office and will caravan to the refuge from there.</p> <p>The Tuleyome office is located at 607 North Street, Woodland, CA 95695, on the corner of First and North Streets. We will be parking in the lot behind be the Woodland Library</p> <p><i>This field trip is going to take up the majority of the day, do not plan other appointments or outings for this date. This particular trip is meant to get you excited about the local</i></p>	<ul style="list-style-type: none"> • Dress appropriately for the weather. Wear closed-toed shoes (as sandals and open-toed shoes are not allow on any of Tuleyome’s outings). • If you’re driving, make sure you have a full tank of gas • Bring snacks, a lunch, and water



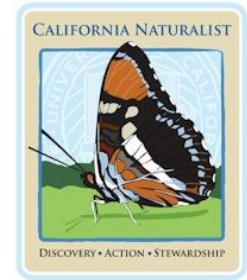
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Week #	Date	Course Topic / Speakers	Homework Assignments
		<p>animal species and teach you a little bit about wetlands management in the region. The Sacramento National Wildlife Refuge hugs the border between Glenn and Colusa Counties and is adjacent to the far north end of the Berryessa Snow Mountain National Monument. It is home to hundreds of species of birds, mammals, insects, and plants. There are restrooms at the nature center, and a composting toilet mid-way through the auto-tour route. We will be taking the auto-tour around the refuge which is slow-paced drive at around 2- to 4-miles per hour. If there is time afterwards, we will walk the Wetlands Trail (which is level and well-marked) or we can drive over to the Colusa National Wildlife Refuge and look at species there as well.</p> <p>Learning Focus: Today we'll be focusing on identifying bird and animal species, how to translate what you see into your field journal, and how to use field equipment like binoculars, birding scopes and hand lenses.</p> <p>ONLY SEVERE WEATHER / ROAD CLOSURES WILL CANCEL</p>	<ul style="list-style-type: none"> • Bring a camera • Bring binoculars if you have them • Your field notebook • Your favorite birding field guide • \$6 for the day-use fee (per vehicle)
3	Friday, February 16, 2018	<ul style="list-style-type: none"> • <i>Geology, Climate and Soils</i> • Vocabulary/ questions / demonstration • Guest Speaker: TBA • Open Hour", species identification, one-on-one with an instructor, etc. 	<ul style="list-style-type: none"> • Select a capstone project and fill out capstone project form • Make at least 1 entry in your field journal • Make at least 1 entry into iNaturalist • Read Chapter 3: "Water" in the textbook
4	Friday, February 23, 2018	<ul style="list-style-type: none"> • <i>Water</i> • Vocabulary/ questions / demonstration • Guest Speaker: Putah Creek Council • Open Hour", species identification, one-on-one with an instructor, etc. 	<ul style="list-style-type: none"> • Make at least 1 entry in your field journal • Make at least 1 entry into iNaturalist • Read Chapter 4: "Plants"
5	Friday, March 2, 2018	<ul style="list-style-type: none"> • <i>Plants</i> • Vocabulary/ questions / demonstration • Guest Speaker: Christina Lewis, SacValley CNPS • Open Hour", species identification, one-on-one with an instructor, etc. 	<ul style="list-style-type: none"> • Make at least 1 entry in your field journal • Make at least 1 entry into iNaturalist • Read Chapter 5: "Forest, Woodland and Range Resources and Management"



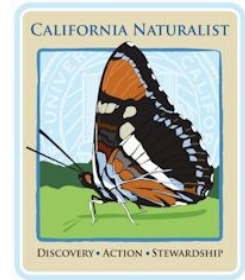
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Week #	Date	Course Topic / Speakers	Homework Assignments
	Saturday, March 3, 2018	<p>Field Trip #2 Location: Lake Solano Park Meeting Place: We will meet in the back parking lot of the Woodland Public Library.</p> <p><i>This field trip is going to take up the majority of the day, do not plan other appointments or outings for this date.</i> This trip will take to one of the gateway cities of the Berryessa Snow Mountain National Monument. Lake Solano was created by damming a portion of Putah Creek. Here we will see a mini-version of a riparian habitat, see how a park is situated and maintained inside a rural area, and get a look at some of the plant species in the region. There are restroom facilities in the park. If there is time, we will also head up to the Monticello Dam and Lake Berryessa.</p> <p>Learning Focus: “Water”, riparian habitats, how dams can influence the topography of the landscape and species diversity. (This will be something of a follow up to the presentation by the Putah Creek Council on Feb. 23rd. We will actually be looking at the waterways they oversee.</p> <p>ONLY SEVERE WEATHER / ROAD CLOSURES WILL CANCEL</p>	<ul style="list-style-type: none"> • Dress appropriately for the weather. Wear closed-toed shoes (as sandals and open-toed shoes are not allow on any of Tuleyome’s outings). • If you’re driving, make sure you have a full tank of gas • Bring snacks, a lunch, and water • Bring a camera • Bring binoculars if you have them • Your field notebook • Your favorite birding field guide • \$6 for the day-use fee (per vehicle)
6	Friday, March 9, 2018	<ul style="list-style-type: none"> • <i>Forest, Woodland and Range Resources and Management</i> • Vocabulary/ questions / demonstration • Guest Speaker: Sarah Matthews, Bureau of Land Management • Open Hour”, species identification, one-on-one with an instructor, etc. 	<ul style="list-style-type: none"> • Make at least 1 entry in your field journal • Make at least 1 entry into iNaturalist • Read Chapter 6: “Animals”
7	Friday, March 16, 2018	<ul style="list-style-type: none"> • <i>Animals (Part 1)</i> • Vocabulary/ questions / demonstration • Guest Speaker: TBA • Open Hour”, species identification, one-on-one with an instructor, etc. 	<ul style="list-style-type: none"> • Make at least 1 entry in your field journal • Make at least 1 entry into iNaturalist • Read Chapter 7: “Energy and Global Environmental Issues”



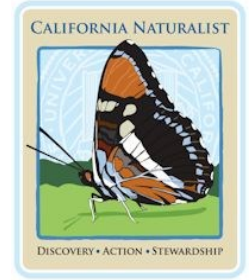
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Week #	Date	Course Topic / Speakers	Homework Assignments
8	Friday, March 23, 2018	<ul style="list-style-type: none"> • <i>Energy and Global Environmental Issues</i> • Vocabulary/ questions / demonstration • Guest Speaker: Stephen McCord, Mercury Mine Remediation • Open Hour”, species identification, one-on-one with an instructor, etc. 	<ul style="list-style-type: none"> • Make at least 1 entry in your field journal • Make at least 1 entry into iNaturalist
	Saturday, March 24, 2018	<p>Field Trip #3 Location: <i>Wildflower Tour (Highway 16 and 20, Bear Creek Road)</i> Meeting Place: We will meet in the back parking lot of the Woodland Public Library.</p> <p><i>This field trip is going to take up the majority of the day, do not plan other appointments or outings for this date. This will be a driving tour along Highways 16 and 20 (and possibly Bear Creek Road). The trip will take you into parts of the Berryessa Snow Mountain National Monument. We will be driving to different locations and then getting out of the vehicles to get acquainted not only with the wildflowers in the region, but also with some of the trailheads that lead deep into the national monument. There are no restroom facilities along the route (unless we go over to Cowboy Camp) so plan accordingly.</i></p> <p>Learning Focus: “Plants”, species identification, how agriculture can impact on plant diversity, etc.</p> <p>ONLY SEVERE WEATHER / ROAD CLOSURES WILL CANCEL</p>	<ul style="list-style-type: none"> • Dress appropriately for the weather. Wear closed-toed shoes (as sandals and open-toed shoes are not allow on any of Tuleyome’s outings). • If you’re driving, make sure you have a full tank of gas • Bring snacks, a lunch, and water • Bring a camera • Your field notebook • Your favorite wildflower guide
9	Friday, March 30, 2018	<ul style="list-style-type: none"> • <i>Animals (Part 2)</i> • “Your Naturalist Knowledge” Bio-Blitz Game: work with teammates to answer a series of questions based on the information provided in the previous classes to win gift baskets filled with nature-based items like field guides and other books, gift certificates for outdoor gear, gifts from local farms, plant-based colognes, and lots of other items! • Field Journal grading • Guest Speaker: Kelli Moulden of Hawks, Honkers and Hoots 	<ul style="list-style-type: none"> • Finish up your capstone project and be ready to present it next week! • Bring something for the potluck



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Week #	Date	Course Topic / Speakers	Homework Assignments
		<ul style="list-style-type: none"> • Open Hour”, species identification, one-on-one with an instructor, etc. 	
10	Friday, April 6, 2018	<ul style="list-style-type: none"> • Graduation! • Capstone Projects • Potluck 	<i>None, yay!</i>