**California Naturalist Central Sierra: Yosemite Immersion Class**

**Sunday, November 1 – Saturday, November 7, 2015**

**UC Merced Sierra Nevada Research Institute – Yosemite Field Station**



Class Syllabus (Note: Class Meeting Dates Confirmed;

Other Details Subject to Change)

**Lead Instructors/Course Facilitators:**

**Pete Devine,** Yosemite Conservancy naturalist; PDevine@yosemiteconservancy.org

**Jacob Croasdale,** UC Merced;jcroasdale@ucmerced.edu

**Kaitlin Lubetkin,** Sierra Nevada Research Stations; klubetkin@umerced.edu

**Guest Lecturers:**

**Tim Kuhn,** Yosemite National Park hydrologist

**Steven Lee,** USGS

**Len Nielson,** CAL FIRE

**Greg Stock,** Yosemite National Park geologist

**Andie Thrams,** visual artist

**About the Course:**

*California Naturalist is a program developed by the University of California Cooperative Extension to foster eco-literacy and a committed corps of volunteer naturalists and citizen scientists trained and ready to take an active role in natural resource conservation, education, and restoration.*

This course will be a week-long immersion training course that offers participants content specifically focused on the ecosystem linkages of the Sierra Nevada, with an emphasis on Yosemite National park. This 40-hour course consists of presentations, field trips, and lively collaborative discussions about individual components of the ecosystem, including influences on and interconnections with the whole system. Led by scholars and professionals in their fields, these sessions introduce and expand on the roles and importance of each entity, using examples from Sierra communities while relating to California’s unique ecology and natural history. Time in the field with researchers and professionals gives participants first-hand experiences in seeing nature from a scientist’s perspective. Participants will also have an opportunity to interpret what they see to make meaning for themselves and others.

The course will take place in a residential setting at the Sierra Nevada Research Station in Yosemite. Lodging is included in the course fee and is a requirement for all participants since activities begin early each morning and continue through the evening. Participants will stay in semi-rustic cabins in the small town of Wawona at the southern end of Yosemite. The course fee also includes all meals, with six catered dinners.

Participants will become part of the venerable tradition of naturalists throughout history. By the end of this course, participants will be able to:

* Understand what it means to be a naturalist.
* Integrate knowledge about the interconnectedness of abiotic and biotic factors and their influence on the natural history of the Sierra Nevada and Yosemite National Park.
* Demonstrate skills in making and recording natural history observations in a field notebook.
* Apply knowledge of the Sierra Nevada ecosystem to local and global environmental issues.

*Capstone Project*

Certification as a California Naturalist requires that each participant plan and complete a Capstone Project. A Capstone Project should be something that can be completed in a relatively short time period (eight hours) and must focus on stewardship, education/interpretation, citizen science, or program support. Participants may work individually or in teams to design and implement their Capstone Projects. Since time is limited during the week, participants in the immersion course will need to design a Capstone Project to implement after the course. At the end of the week, each participant will give a 5-15 minute oral presentation describing a fully fleshed plan for how they will complete their Capstone Project.

*Participation*

Participants will be required to attend class meetings and field trips during this one-week immersion course, and to complete a Capstone Project and presentation, in order to obtain the California Naturalist certificate. The course consists of required pre-course reading and full participation throughout the week. While each day is filled with new content and activities, the alternation of presentations, field sessions, and hands-on activities sets a comfortable pace with time for reflection and taking care of personal needs. The residential format allows participants to develop deeper connections with the area and fosters a sense of camaraderie with fellow participants.

**Volunteer Service:**

After completing the California Naturalist Yosemite training program, participants are expected to complete 40 hours of volunteer service relating to California’s natural or environmental cultural history (stewardship, education/interpretation, citizen science, or program support). Hours spent planning, developing, and completing the Capstone Project count toward this 40-hour requirement. We provide information on local opportunities, and students are encouraged to participate in and conduct activities with agencies within their own communities.

**Naturalist Field Notebook:**

Naturalists document their field observations with notes and sketches in a detailed Field Notebook. It is a course requirement to keep a Field Notebook during the course and hopefully beyond. Keeping a Field Notebook, and better yet a detailed field journal, is one of the best ways of recording observations for future reflection and for fostering continued learning and development as an experienced naturalist. Participants also record observations in an online field data collection and social networking tool called iNaturalist.

**Registration and Fees:**

The course registration fee is $750. Class size is limited to 25 participants. Fees include lodging, meals, course instruction and field sessions, graduation certificate, California Naturalist registration, website support, and lapel pin. Students will be provided a nature journal, but will need to purchase the required text, *The California Naturalist Handbook*, prior to the start of the course.

For an additional fee, Continuing Education Credits (CEUs) are available through UC Davis Extension to teachers and undergraduate students who successfully complete the course. If you desire CEUs, please speak to the course coordinator.

*Refund policy*

4 weeks before the course (10/5/15): full refund minus a $25 service charge

2 weeks before the course (10/19/15): refund minus lodging ($120) and a $25 service charge. Lodging will be refunded if we can find an applicant on the waiting list able to take the place of the person canceling.

1 week before the course (10/26/15): no refund unless we can find an applicant on the waiting list able to take the place of the person canceling. If we can find a replacement participant, refund minus a $25 service charge.

**Required Text:**

*The California Naturalist Handbook*, UC Press, 2013

**Meeting Times and Locations:**

The California Naturalist Yosemite immersion class will meet at the Sierra Nevada Research Station in Wawona, California (just inside the south entrance to Yosemite National Park) midday on Sunday, November 1. We will depart after lunch on Saturday, November 7, 2015.

The course schedule is outlined below. Guest speakers will present information and lead discussions about specific topics. Field sessions correlate with each topic. Readings listed are from the *California Naturalist Handbook*. Homework questions and assignments will be available at a later date.

Day 1: Sunday, November 1st

**11:30 – 1:00 Cabin assignments, unpack, settle in**

Location: Sierra Nevada Research Stations, Yosemite Field Station

7799 Chilnualna Falls Road, Wawona, 95389

**1:00 – 2:30 Welcome, introduction to the California Naturalist Program, Volunteer Management System, and iNaturalist**

Location: Field Station classroom

Staff: Pete Devine, Jacob Croasdale, Kaitlin Lubetkin

Reading: Chapter 1, *California Natural History and the Role of Naturalists*

**2:30 – 5:00 Guided Journaling Activity**

Location: Field Station classroom, Wawona area

Staff: Andie Thrams, visual artist

Reading: Chapter 1, *California Natural History and the Role of Naturalists*

**5:30**  **Dinner**

**7:00 – 9:00 Nine Paradigms that Everyone Needs to Know about Yosemite**

Location: Field Station classroom

Staff: Pete Devine

Reading: Chapter 8, *Interpretation, Collaboration, and Citizen Science*

Day 2: Monday, November 2nd

**Prior to 8:00 Breakfast, assemble food for lunch**

**8:00 – 12:00 Geology**

Location: Field Station classrooom

Staff: Greg Stock, Yosemite National Park geologist

Reading: Chapter 2, *Geology, Climate, and Soils*

**12:00**  **Lunch (Glacier Point)**

**12:30 – 3:00 Journaling, and iNaturalist**

Location: Field Station classroom, Wawona area

Staff: Pete Devine, Kaitlin Lubetkin

Reading: none

**3:00 – 4:00 Capstone Preparation**

Location: Field Station classroom

Staff: Pete Devine, Kaitlin Lubetkin

Reading: none

**5:30**  **Dinner**

**7:00 – 8:00 Homework, discussion, etc.**

Location: Field Station classroom

Staff: Participants

Reading: Chapters 1, 8, & 2

Day 3: Tuesday, November 3rd

**Prior to 8:00 Breakfast, assemble food for lunch**

**8:00 – 9:00 Meet at classroom, carpool to Sentinel Bridge**

**9:00 – 12:00 Water**

Location: Yosemite Valley

Staff: Tim Kuhn, Yosemite National Park hydrologist

Reading: Chapter 3, *Water*

**12:00**  **Lunch (Yosemite Valley)**

**1:00 – 4:00 Plants**

Location: Tuolumne Grove

Staff: Kaitlin Lubetkin, Sierra Nevada Research Stations

Reading: Chapter 4, *Plants*

**5:30**  **Dinner**

**8:00 – 9:00 Homework, discussion, etc.**

Location: Field Station classroom

Staff: Participants

Reading: Chapters 3 & 4

Day 4: Wednesday, November 4th

**Prior to 9:00 Breakfast, assemble food for lunch**

**9:00 – 12:00 Forest, Woodland, and Range Resources and Management**

Location: Chowchilla Mountain Road, Wawona

Staff: Len Nielson, CAL FIRE

Reading: Chapter 5, *Forest, Woodland, and Range Resources and Management*

**12:00**  **Lunch (Wawona)**

**1:00 – 2:00 Animals**

Location: Field Station classroom

Staff: Steven Lee, USGS

Reading: Chapter 6, *Animals*

**2:00 – 4:00 Journaling, iNaturalist**

Location: Wawona Meadow

Staff: Participants

Reading: none

**4:00 Free time, work on capstone**

**5:30**  **Dinner**

**7:00 – 8:00 Homework, discussion, etc.**

Location: Field Station classroom

Staff: Participants

Reading: Chapters 5 & 6

Day 5: Thursday, November 5th

**Prior to 8:30 Breakfast, assemble food for lunch**

**8:30 – 4:00 Animal Hike with Focus on Avifauna; lunch on the hike**

Location: Wawona area

Staff: Pete Devine

Reading: Chapter 6, *Animals*

**4:45 Meet at Field Station office, carpool to Oakhurst**

**5:30**  **Dinner in Oakhurst (El Cid)**

Day 6: Friday, November 6th

**Prior to 9:00 Breakfast, assemble food for lunch**

**9:00 – 10:30 Energy and Global Environmental Issues**

Location: Field Station classroom

Staff: Pete Devine

Reading: Chapter 7, *Energy and Global Environmental Issues*

**10:30 Free time, work on capstone, iNaturalist, journaling**

**12:00**  **Lunch (Wawona)**

**1:00 – 2:00 Work on capstone**

**2:00 – 5:00 Capstone Presentations**

Location: Field Station classroom

Staff: Participants

Reading: none

**5:30**  **Dinner**

**7:00 – 9:00 Astronomy**

Location: Meet at field station office

Staff: Pete Devine

Reading: none

Day 7: Saturday, November 7th

**Prior to 10:00Breakfast, pack, clean**

**10:00–11:00 Capstone Presentations**

Location: Field Station classroom

Staff: Participants

Reading: none

**11:00–12:00 Wrap up**

Location: Field Station classroom

Staff: Participants

Reading: none

**12:00**  **Graduation lunch (Wawona)**