

## Citizen Science: Phenological Monitoring in Joshua Tree National Park

### Information

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Date/ Time: Saturday, May 9, 6 pm – 8 pm

Sunday, May 10, 8 am – 5 pm

Meet at: [Black Rock Nature Center](#) (click on link for a map of the meeting site)

9800 Black Rock Canyon Rd, Yucca Valley, CA

Instructor: Monica Gorman, Ph.D., Biology, National University

### Overview

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Climate change is on everyone's mind these days, and as Californians, we are all wondering what effects rising global temperatures are going to have on our state. Here's your chance to help answer that question. Learn how to become a citizen scientist and collect data on the effects of climate change on plants for the California Phenology Project. You will learn both how to monitor plants in Joshua Tree National Park, and how to monitor them in your own backyard. We will spend Saturday night in the classroom and Sunday monitoring plants on Ryan Mountain. The hike up Ryan is 1.5 miles (3.0 miles round-trip) with an elevation gain of about 1000 feet and will end with fantastic views of the Park from the summit. **Come be part of the solution, not the problem!**

### Itinerary

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Saturday, May 9, 6 pm – 8 pm

*Black Rock Visitor Center*

- Lecture

Sunday, May 10, 8 am – 5 pm

*Joshua Tree Visitor Center*

- Meet in the parking lot and caravan into the park
- Morning field class
- Lunch break, **bring your own food**
- Afternoon field class

### What to Bring to the Course

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## **Required Class Materials:**

### ***The 10 Essentials: Every day in the Desert***

- Day pack
- 4 quarts of water
- Closed toe hiking shoes
- Dinner and snacks
- Clothing layers
- Hat
- Sun glasses
- Sunscreen
- Notebook and pencil/pen
- Whistle

## **Fitness Requirements**

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Participants must be in good physical condition for courses/activities in a desert that may be hot, dry, windy, and sometimes surprisingly cold

## **Hike Level**

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**Moderately strenuous as we will be summiting Ryan Peak.** The 3-mile round trip trail climbs 1,050 feet up a dirt trail with numerous stone steps. The sun-exposed trail crowns a 5,457-foot mountain with impressive panoramic views of the jumbled rock formations and Joshua tree forests that surround the peak. The summit of Ryan Mountain is the best place to get a top-down view of the heart of the park.

## **College Credit**

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If taking this course for 1 unit of Biology (X413) credit through the University of California Riverside Extension, (70%) attendance/participation, (30%) field notes, quiz and species identification will determine your grade.

## **Guidelines**

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- You are responsible for your safety.
- Park your car in designated areas only. Parking along the side of the road is dangerous to you and the environment.
- Rattlesnakes are present in the desert. Avoid contact with wildlife. Put your hands and feet only where you can see them.
- Stay with the group. If you get lost, stay put.
- Drink plenty of water. If you run out, notify the instructor or the Desert Institute Representative.

- Watch your step. Some of the class is at night, please bring a flash light and beware of uneven ground and equipment.
- Before leaving the class, check out with the Desert Institute Representative.

### **Instructor Biography**

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MONICA GORMAN holds a Ph.D in Biology and a J.D. She has spent most of the last 20 years teaching a wide range of biology courses at colleges in the Bay Area and Los Angeles, although she took time off from teaching to earn her J.D., work as a biotechnology patent lawyer, and travel. She moved to Joshua Tree in 2011 and currently teaches at Los Angeles City College and the Twentynine Palms Marine Base. She is an avid desert enthusiast and spends most of her free time exploring and hiking in Joshua Tree National Park.

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\* The Desert Institute staff/instructors will attempt to accommodate participants needs, however we reserve the right to deny a student participation in the course due to concerns regarding health and safety issues.