

*at Joshua Tree National Park*

74485 National Park Dr. Twentynine Palms, CA 92277

Phone: 760-367-5539 e-mail: desertinstitute@joshuatree.org

# Geology and Natural History of Joshua Tree National Park

## Information

---

Date/ Time: Saturday, December 3rd, 9:00 AM – 5:00 PM  
Sunday, December 4<sup>th</sup>, 9:00 AM – 1:00 PM  
Meet at: **Park Headquarters, 29 Palms**  
74485 National Park Dr, Twentynine Palms, CA 92277  
Instructor: Ted Reeves

## Overview

---

Investigate the natural architecture and origin of Joshua Tree National Park's landscape with Ted Reeves. Starting in the classroom participants will be introduced to basic geologic principles including major rock groups, plate tectonics, mountain building, and the impact of weathering and erosion. Ted will discuss how these processes worked together to form the fantastic desert landscape of the park.

The class will venture into the field on two excursions to observe and identify monzogranite, gneiss, dikes, volcanic rocks, inselbergs, and alluvial fans. For those with an interest in geology, Ted will make learning about the complex and unique landscape of Joshua Tree National Park comprehensible and fun.

## Itinerary

---

**Saturday, December 3<sup>rd</sup>, 9:00AM:** Meet at Park Headquarters

- 2-hour lecture and discussion with a Power Point presentation
- Lunch break. **Bring your own food.**
- **Field Trip Stops**
  - Geology Tour Road
  - Arch Rock
- Class will end between 4 and 5PM

**Sunday, December 4<sup>th</sup>, 9:00AM:** Meet at Park Headquarters

- **Field Trip Stops**
  - Pinto Mountain Fault
  - Keys View
  - Hidden Valley – 1-mile loop trail walk
- Class will end around 1PM

## What to Bring to the Course

---

### **Reading**

- Trent & Hazlett, *Joshua Tree National Park Geology*, available at visitor centers or online at [joshuatree.org/store](http://joshuatree.org/store)

### **Gear List:**

- High-clearance vehicle
- Day pack
- 4 quarts of water
- Sturdy walking shoes
- Lunch and snacks
- Clothing layers
- Hat
- Sun glasses
- Sunscreen
- Notebook and pencil/pen
- Whistle

## Fitness Requirements

---

Participants must be in reasonably good physical condition.

## Hike Level

---

Easy to Moderate

## Guidelines

---

- 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 park. Avoid contact with wildlife. Put your hands and feet only where you can see.
- 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.
- Before leaving the class, check out with the Desert Institute Representative.

## **Instructor Biography**

---

Ted Reeves, B.A., Biology, has taught Biology and Geology at Chaffey High School in Ontario, CA for 37 years. He has led field trips in Southern California, Yosemite, Yellowstone, the Tetons, Grand Canyon, and Hawaii. He is presently teaching for University of the Pacific and believes that a relevant Natural History class requires an outdoor experience.

---

\* 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.