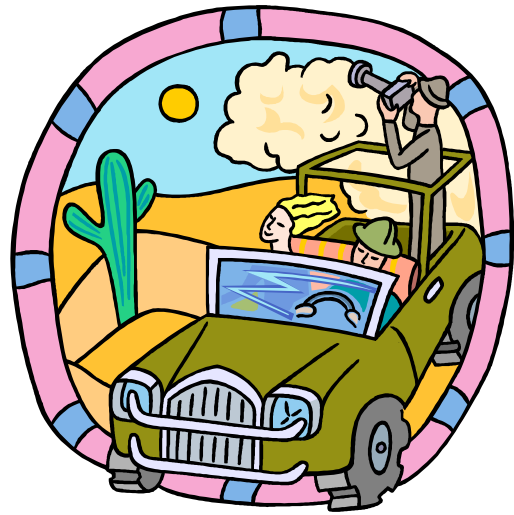


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## Death Valley Field Studies, 2017

**What is it about?** Death Valley is possibly the most spectacular geologic exposure in the entire western United States. The oldest rocks and fossils are found here, as well as rocks from every geologic era. The presence of recently active volcanoes and faults make it an ideal laboratory for the study of structural geology, and the unique animal and plant species allow us to understand adaptation and evolution in a harsh climate.

It should be understood that this trip will be a rigorous test of your patience and health. There will be several **long driving days**, and conditions may become harsh, with **rain, snow and wind** as serious possibilities (on the other hand, there is fair chance of working on your tan as well!). The success of the trip will depend on your amiability and willingness to put up with inclement conditions.



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**Dates:** February 16-20, 2017: **Please note:** you will be missing class on Thursday night. Make arrangements **now** to make up any missed assignments.

**Academics:** 2 units. Add codes available from Garry Hayes, SCC 336. Fee is \$90.00, payable at time of admission. Payments are made in the MJC Business Office in the Student Center (the fee is not charged when you enroll; you have to go to the business office). **The fee must be paid before the trip.**

**Text (Recommended):**

*Geology of Death Valley National Park* by Miller and Wright (2<sup>nd</sup> edition is best)  
*Geology Underfoot in Death Valley and Owens Valley*, by Sharp and Glazner

**Academic Requirements:**

**BEFORE THE TRIP:**

- You must attend the **organizational meeting:** Thursday, Feb. 2 at 5:30 PM in Science Community Center Room 326 on West Campus
- You must research and write a **short synopsis** (2 pages) on some aspect of the geology of Death Valley National Park or the Mojave Desert. Topics might include the paleontology, mining and resources, or faulting. **This synopsis MUST be submitted BEFORE the trip departure.**

**DURING THE TRIP:**

- You will be expected to take complete lecture notes
- You will be expected to complete the worksheet provided at the beginning of the trip.

**AFTER THE TRIP:**

- Notes and worksheets are to be submitted by February 26
- Final exam on Thursday, March 2 at 5:30 PM in SCC 326

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**Tentative Itinerary:**(Stops and Campsites subject to change)

**Thursday Evening:** (leave at 5:00 PM)

Drive to Bakersfield (200 miles)

Campsite: Kern River County Park - (805) 861-2345

**Friday, Feb. 17:**

**Stops:** Sharktooth Hill  
Redrock Canyon State Park  
Fossil Falls  
Cinder Cone  
Darwin Plateau

**Campsite:** **Stovepipe Wells** or Tecopa Hot Springs, Death Valley. Note that flexibility on your part is needed: no reservations can be made, and in the worst case scenario, we might be camping in the middle of nowhere in the desert, without facilities. At best, camp facilities are somewhat limited: no tables or chairs. Fairly expensive restaurants and showers MAY be available nearby. See equipment list for recommendations.

**Saturday, Feb. 18:**

**Stops:** Jubilee Pass Chaos and Aulacogen  
Cinder Hill  
Black Mountains  
Badwater, Fault Scarps  
Devil's Golf Course  
Death Valley Sand Dunes  
Mosaic Canyon

**Campsite:** Same as previous night

**Sunday, Feb. 19:**

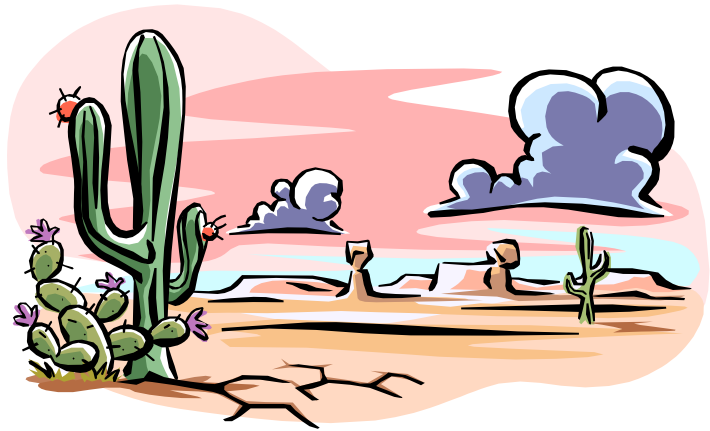
**Stops:** Charlie Brown Outcrop  
Emigrant Pass  
Tecopa Lakebeds  
Gower Gulch  
Dantes View  
Titus Canyon or  
Ubehebe Craters

**Campsite:** Same as previous night

**Monday, Feb. 20:**

**Stops:** Mosaic Canyon  
Fossil Falls

Route home will be by way of Bakersfield.  
Return to MJC, approximately 8:00pm



**Logistics:**

You will be responsible for your own meals for this trip. I strongly recommend getting together with others to save money and space. Keep meals as simple as possible. For breakfast, it is best to use meals requiring only milk or hot water for their preparation. Lunches should consist of snacks that can be eaten all day. Dinners are easiest when they're out of a can! Expect to bring or buy dinner on Thursday evening. You will need 4 dinners, lunches and breakfasts.

We will be camping out and **there are no assurances that we will be in a campground every night.** Cold temperatures are **very likely.** Wind, snow and cold rain are possibilities. Please be prepared to be comfortable in these conditions. We will be doing some moderate hiking, so please bring adequate walking shoes as well.

**No alcohol or drugs** allowed at school functions. Use of these substances is grounds for immediate removal from the trip and a long bus ride home at your expense.

You may wish to bring some extra cash for junk food, visitor center trinkets, or other items essential to survival.

**Suggested Equipment**

SPACE IS AT A PREMIUM: PLEASE PACK AS COMPACTLY AS POSSIBLE!

**Personal:**

Warm Sleeping Bag	Foam Pad
Personal Toilet Kit	Day Pack
Eating utensils, cup, plate	Poncho or rainsuit
Warm jacket or coat (layers)	Warm hat
Walking shoes	Gloves or mittens
Changes of clothes	Flashlight (two)
Sunglasses	Extra batteries
Sunscreen	Toilet Paper
Clipboard, Pen, Pencils	Paper
Towel	Canteen
Lip balm	Ground cloth

**Group**

Tent	Cleaning supplies
Cooking utensils	Ice Chest
Stove	Lantern

**Optional:**

Camera	Rock hammer
Extra blanket	Small folding chair
Small pillow	

**Upon satisfactory completion of this course, the student should be prepared to:**

1. Identify the characteristic rock, fossil, and mineral specimens, landforms, and geologic structures found in Death Valley National Park and adjacent parts of the Basin and Range and Mojave Desert provinces.
2. Model the geologic history of Death Valley National Park based on field observations of rock and structure relationships