The Colorado Plateau is one of the most spectacular regions on planet Earth, and it tells a story encompassing more than half of Earth’s history. More than two dozen parks and monuments have been established on the plateau, and we will be visiting most of them! We are pleased that you have chosen to participate in this year's expedition, and we are looking forward to traveling together with you! Please read through the following information carefully, and meet the appropriate deadlines in a timely fashion.

**Facilities and Conditions:** This can be a rugged trip. We are camping for two weeks in a variety of settings, ranging from cushy campgrounds with showers and laundry, to barren primitive sites with no facilities (but with great views!). There will be a great deal of driving, but the vans are air-conditioned and are comfortable (within limits). Weather conditions will range from blazing hot (if we hit a heat wave, temperatures could exceed 105°F) to rather cool if not downright cold (some camps will be at more than 8,000 feet). Thunderstorms will be a definite possibility at times. Please be prepared to operate comfortably under any of the above conditions.

**Comestibles:** The fee for the trip includes all your food needs, breakfast, lunch and dinners. We have volunteers who are organizing and conducting the food preparation, and all participants will be expected to contribute in the way of cooking, cleaning and packing. A KP list will be provided when we leave on the trip; it is expected that you will be there at your scheduled time. Please let us know if you have any serious food allergies.

**Academics:** Geology 174 is a 3 unit academic course, and you will be responsible for several things to receive a passing grade:
- Submitting complete lecture notes and worksheet following the trip
- Passing occasional quizzes during the trip
- Presentation of at least one topic during the trip

The presentations will be chosen from the list provided in this announcement. This assignment is made for the purpose of giving you a personal “ownership” of at least one of the parks or localities that we will see on the trip, and affording you the experience of preparing and giving presentations of scientific topics. Most people worry about public presentations, but it will quickly become clear that they are not threatening in our small group setting. Everyone on the trip will be doing one, and so all of us will be supportive of your efforts, just like you will be supporting the others. These presentations should be ready prior to the trip: references, resources, diagrams and duplicating are available through my office. I will be glad to assist you in any way I can.

**Community and Collegiality:** A journey of this nature can be a challenge. It is a long trip, and sometimes tempers may rise, or feelings get hurt. Please maintain some perspective at all times and think of the morale of the group before you complain or argue about anything. If problems or personality conflicts arise, come and talk to me and we will resolve them. **Alcohol and drugs** are most disruptive and absolutely **will not be tolerated.**

**Fees:** This is a three unit course, so a per-unit fee applies. There is also a trip fee of $650 which covers transportation, food, camp fees, entry fees and teaching materials. It is paid in the MJC Business Office in the Student Center on East Campus.
I always look forward to getting back on the plateau, and I find inspiration and fulfillment from the experience. I trust it will be so for you as well. Take advantage of all that this land has to offer in the way of insight, understanding, and inspiration. It is truly a trip of a lifetime!

**Timetable**

**Monday, April 22:** Organizational Meeting, 7:00 in Science 132. **Purpose:** Orientation, selection of topics, review of equipment needs, and preparation for fundraising event.

**TBA at April 22 Meeting:** BBQ and gathering, BYO meat and one salad or dessert to share, I'll provide drinks and charcoal. Place to be announced. **Purpose:** final arrangements, assistance with logistics, social introductions, and some fun.

**Thursday, June 13 or Friday, June 14:** Final shopping and equipment preparation/packing. Bring gear between 2 and 4 PM Friday to school for loading in vans (to save time on Saturday). We will be meeting and packing the vans outside the NEW Science Community Center on WEST campus.

**Saturday, June 15, 6:30 AM:** Leave from Science Community Center. **Make arrangements to leave vehicles at home**

**Saturday, June 29:** arrive home at MJC approximately 5:00 PM

**Tentative Itinerary**

**Saturday, June 15:**
- Leave MJC at 6:30 AM
- **Stops:** Rainbow Basin or Calico Ghost Town
- **Camp:** Black Canyon/Hole in the Wall, Mojave National Preserve
- **Facilities:** water, picnic shelter, vault toilets
- **Conditions:** hot and dry
- **Emergency phone:** Mojave National Preserve, (760) 252-6100

**Sunday, June 16:** Mojave National Preserve to Zion National Park
- **Stops:** Frenchmans Mountain, Las Vegas
  - Valley of Fire State Park and Lake Mead National Recreational Area
- **Camp:** Zion National Park, Group Campground
- **Facilities:** water, flush toilets
- **Conditions:** hot (cool in the Narrows)
- **Emergency phone:** Zion National Park (435) 772-3256

**Monday, June 17:** Zion to Grand Canyon National Park, North Rim
- **Stops:** Angels Landing or Virgin Narrows hikes, Zion Arch Overlook
  - Coral Pink Sand Dunes State Park
  - Grand Canyon, North Rim
- **Camp:** North Rim Group Campground, Grand Canyon National Park
- **Facilities:** Water, flush toilets, showers, laundry, grocery
- **Conditions:** Cool and comfortable (7,500 feet)
- **Emergency phone:** Grand Canyon National Park, (520) 638-7888

**Tuesday, June 18:** Grand Canyon National Park
- **Stops:** Hike, Kaibab or Widforss Trail
  - Cape Royale
  - Point Imperial
- **Camp and facilities:** same as above
**Wednesday, June 19:** Grand Canyon to Navajo National Monument

**Stops:** Colorado River, Glen Canyon Dam
Antelope Canyon
Horseshoe Bend
Navajo Indian Reservation

**Camp:** Navajo National Monument

**Facilities:** Water, vault toilets

**Conditions:** Warm and dry

**Emergency phone:** Navajo National Monument (928) 672-2700

**Thursday, June 20:** Navajo National Monument to Cedar Mesa

**Stops:** Black Mesa Strip Mine
Navajo National Monument
Agathlas Needle
Monument Valley
San Juan River
Valley of the Gods
Goosenecks of the San Juan

**Camp:** Near Muley Point Overlook, Cedar Mesa

**Facilities:** absolutely none, but an incredible view…

**Conditions:** moderate, thunderstorms a possibility

**Emergency phone:** San Juan County Sheriff, Blanding or Monticello, Utah

**Friday, June 21:** Cedar Mesa to Mesa Verde National Park

**Stops:** Natural Bridges National Monument
Abajo Mountains
Anasazi Ruins and Hovenweep National Monument
Mesa Verde National Park

**Camp:** Morefield Campground, Mesa Verde National Park

**Facilities:** Water, flush toilets, showers, laundry, grocery

**Conditions:** Moderate to cool

**Emergency phone:** Mesa Verde National Park (970) 529-4475 or (970) 533-7731

**Saturday, June 22:** Mesa Verde to Ouray, Colorado

**Stops:** Animas River, Durango
Mesa Verde Cliff Dwellings, Spruce Tree House
Silverton Caldera
Bear Creek Glacier Deposits

**Camp:** Ouray KOA

**Facilities:** water, flush toilets, showers

**Conditions:** moderate to cool

**Emergency phone:** (970) 325-4736

**Sunday, June 23:** Ouray to Arches National Park

**Stops:** Black Canyon of the Gunnison National Monument
Colorado National Monument
La Sal Mountains
Colorado River Canyon

**Camp:** Arches National Park Group Campground

**Facilities:** water, flush toilets

**Conditions:** moderate to warm, may be windy

**Emergency phone:** Arches National Park, (435) 259-8161
Monday, June 24: Canyonlands and Arches National Parks
   Stops:  Upheaval Dome
           Arches National Park
           Island in the Sky, Canyonlands
           Moab Fossil Hunt
           Delicate Arch Sunset Hike
   Camp:  Arches National Park Group Campground (see above)

Tuesday, June 25: Arches to Goblin Valley State Park
   Stops:  Green River Dinosaur Hunt
           Cold Water Geyser
           Goblin Valley
   Camp:  Goblin Valley State Park
   Facilities: water, flush toilets, showers
   Conditions: hot
   Emergency phone: Goblin Valley State Park (435) 564-3633

Wednesday, June 26: Goblin Valley to Kodachrome Basin State Park
   Stops:  Capitol Reef National Park
           Uranium Mines
           Anasazi State Park, Boulder
           Escalante Petrified Forest
   Camp:  Kodachrome Basin State Park Group Campground
   Facilities: Water, flush toilets, showers
   Conditions: warm to hot
   Emergency phone: Kodachrome Basin State Park (435) 679-8562

Thursday, June 27: Kodachrome to Thomas Mountain, Utah
   Stops:  Bryce Canyon National Park
           Topaz Mountain
   Camp:  Thomas Mountain Topaz Locality (tentative)
   Facilities: none
   Conditions: unpredictable
   Emergency phone: Sheriff's Department, Millard Co., Delta, Utah, or Juab County

Friday, June 28: Thomas Mountain to Berlin/Ichthyosaur State Park
   Stops:  Great Basin National Park and Lehmann Caves
           Garnet Hill Crystals
           1954 Earthquake Scars
           Berlin-Ichthyosaur State Park
   Camp:  Berlin-Ichthyosaur State Park
   Facilities: water, vault toilets
   Conditions: warm
   Emergency phone: Berlin/Ichthyosaur State Park (775) 964-2440

Saturday, June 29: Berlin to Home
   Stops:  Mono Lake
           Tioga Pass
           Lembert Dome
   Arrive at MJC at approximately 5:00PM
Lecture Topics:

Select three or so of the topics below that you are interested in presenting on the trip. We will select topics at the first organizational meeting on April 22. You will be responsible for at least one presentation. Preparations should be complete prior to leaving on the trip. Available resources in the geology department include duplicating, portable chalkboard, and poster paper. A list of library references is available in my office, as well as a folder of information on each area listed below.

___ Introduction to the Colorado Plateau
___ Geology of Zion National Park
GH Precambrian and Paleozoic History of the Grand Canyon
GH Mesozoic and Cenozoic History of the Grand Canyon
___ Glen Canyon Dam and the Colorado River
___ Antelope Canyon and erosion of slot canyons
___ Navajo National Monument
___ Black Mesa Coal and Strip Mining
___ Raplee Anticline and the Valley of the Gods
___ Monument Valley and the Monument Upwarp
___ Goosenecks of the San Juan River
___ Natural Bridges National Monument
___ Geology of Mesa Verde National Park
___ Silverton Caldera and the San Juan Mountains
___ Black Canyon of the Gunnison and the Ancestral Rockies
___ Colorado National Monument
___ Arches National Park
___ Laccoliths (La Sal, Abajo and Sleeping Ute Mountains)
___ Dead Horse Point and Canyonlands National Park
GH Paradox Basin and Paleozoic Summary
___ Morrison Formation and the Dinosaurs
___ San Rafael Swell and Goblin Valley State Park
___ Capitol Reef National Park and Uranium Developments
___ Escalante-Grand Staircase National Monument and Kodachrome Basin
___ Geology of Bryce Canyon National Park
GH Mesozoic Summary
___ Basin and Range Province
___ Great Basin National Park and Cavern Development
___ Berlin-Ichthyosaur State Park
___ Mono Lake, Pleistocene Ice Ages, Pluvial Lakes
___ Yosemite National Park and the Mesozoic Convergent Margin

If you have some special expertise in some other discipline that would make for a good project, please offer your suggestions:

________________________________________________________________________

________________________________________________________________________

Name: ____________________________________________
Field Trip Emergency Information:

Name: ________________________________.

Address: ________________________________ Zip: ________________.

Phone (home): ____________________ work: ____________________ e-mail ____________________.

Whom do we notify in case of emergency?: ____________________________________________.

__________________________________________

Medical Allergies: ________________________________________________________________.

Medications: (those you are taking, and those to avoid) ________________________________.

Date of Last Tetanus Shot: ____________________.

Special Medical Problems: ________________________________.

______________________________
Suggested Equipment List

Sleeping Bag
Ensolite Pad and/or cot
Ground Cloth
Tent (small, compact, may share with a friend)
Day Pack
Small Beach Chair
Duffle Bag or Suitcase
Non-disposable Water Container(s); 64 oz. total
Pocket Knife
Flashlight with extra batteries and bulb
Notebook
Sketch Pad
Writing and Drawing utensils
Towel and Washcloth
Toilet Paper and Kleenex
Poncho
Sunscreen-High SPF (the sun out there is much more intense)
Bug Repellent
Small Ice Chest or Insulated Bag
Personal Items: soap, shampoo, lip balm, toothbrush and paste, deodorant, etc.
Mess Kit: plate, bowl, utensils, unbreakable mug/Sierra cup

Clothing  4-5 day supply
Short-sleeve and Sleeveless T-shirts
Shorts
Long-Sleeved Shirts
Long Pants
Socks (extras for hiking too)
Underwear
Sturdy Hiking Boots or Athletic Shoes
Comfortable “in camp” Shoes/Sandals
Jacket
Swim suit

Spending Money (for showers, laundry, snacks, souvenirs, books, etc.)
Camera and spare batteries, flash drives
Rock hammer (optional)