

GEOLOGY 230- EVOLUTION OF THE EARTH

FIELD TRIP DESCRIPTIONS

There are three scheduled field trips; one is a half-day trip for the laboratory, and two all day Saturday trips required for majors or prospective majors (optional for others).

The all day field trips survey the local geological history and the evidence for it. Geology is a field science; no matter what branch you go into you must at some point become proficient in the field. Doing geology in the field is a very different thing from doing it in the classroom, and it takes a fair amount of experience to learn it. At this level of your education you cannot have too much practice at doing geology in the field.

**Saturday, March 31 - Section Measuring Field Trip
(alternate day for bad weather, April 7)**

This field trip provides some practical experience with observing rocks in the field and recording those observations. The driving time and work take four or five hours. We will leave from the Miller Hall parking lot at 8:15 and should return about 1:00. The trip will travel west on Rt 33 to Shenandoah Mountain (the large mountain seen as you look west). We will divide into three teams and measure 3 different sections, one containing Bouma sequences, one with hummocky sequences, and one with point bar sequences.

Saturday April 14 - Blue Ridge Field Trip

We will examine the oldest rocks in Virginia (1.2 billion years old), and study some of the evidence by which we have learned that 600 ma the Blue Ridge was a site of active plate rifting which opened the Proto-Atlantic ocean (at that time none of the land east of the Blue Ridge, i.e.the Piedmont, existed yet.)

We leave from Miller Hall parking lot and travel north to New Market, then east on Rt.211 over the Massanutten Mountain to Thornton Gap on the Blue Ridge. Skyline Drive will be followed south to Swift Run Gap and Rt.33, and head back to Harrisonburg. Stops will be made to look at igneous, sedimentary and metamorphic rocks, along with structural geology.

Departure time - 8:30 a.m. RAIN or SHINE. Return around 4:00. You may pack a lunch but we will also stop at a McDonalds in Luray.

Saturday, April 21 - Black Water Falls Field Trip

Field trip begins in the Miller Hall parking lot and goes westward across the West Virginia mountains to Black Water Falls at Davis, West Virginia on the Allegheny Plateau. We will see examples of much of the evidence dealing with mountain building processes and the interpretation of the Appalachian Mountains. There will be opportunities to collect plant and animal fossils. Aside from the geologic wonders the scenery on this trip is beautiful and well worth the ride.

Departure time - 8:30 a.m.RAIN or SHINE. Return about 6:30 p.m.plus or minus. There are no fast food places in Franklin, so you may want to bring a lunch, but we will also stop at a grocery store where you can buy something at the deli. We will eat at Germany Valley about 10 miles down the road - spectacular scenery to view while eating and fossil hunting in the hill just behind the overlook.