

GEL 1020 - GEOLOGY OF COLORADO

VIRTUAL FIELD TRIP EXAM prep: Exploring Colorado's Front Range Virtually

| | |
|-----------------------------|-------|
| Name: | Date: |
| Exam graded through CANVAS: | /50 |

General Instructions

After completing the virtual field trip, taking notes, finding explanations, and viewing the embedded field trip lectures, you are prepared to take the Virtual Field Trip Exam on CANVAS.

The virtual field trip was compiled and lead by Dr. Uwe Kackstaetter & Dr. Barbara EchoHawk from MSU Denver as an official contribution to the field trips of the 2021 Cordilleran Section Meeting of the GSA (Geological Society of America). However, the field trip is completely self guided and can be taken without an official tour guide.

The link to the virtual field trip is found here:

<https://www.geotours.earthscienceeducation.net/GSA2021FT/>

For navigation information and other instructions, see **NEXT PAGE!**

After having completed the virtual field trip you can take the Virtual Field Trip Online Exam on CANVAS. This Exam has a 60 minute time limit and is OPEN notes, OPEN book, OPEN internet.

- *You theoretically could have the virtual field trip site open while taking the exam.*

There is also a downloadable PowerPoint with geologic information hidden on one of the field trip views -

I only asked that you take the exam by your lonely self and that you do NOT use AI!

This exam can be retaken with both scores being averaged. However, be aware that missing the deadline for the exam carries a grade penalty, even for retakes!

To start the EXAM, please go to the course CANVAS page and click the appropriate link under Module 8!

Virtual Field Trip Instructions

This virtual field trip utilizes 360° viewing technology. By using your mouse or touchscreen like a hand you can look completely around 360° from side to side as well as 360° up and down. Certain mobile phones may allow gyroscopic viewing, which means that the movement of the phone will align with the orientation of the 360° images and you can move by rotating your phone.

- The trip is currently being updated so that it should work with VR goggles ,such Metaquest -

TAKING THE VIRTUAL FIELD TRIP

From the main virtual field trip overview page you can access trips to the 8 individual field stops listed by either clicking on the animated round link over the STOP number on the map or on the text link in the “footer” indicating each STOP.




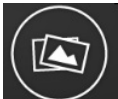


The geologic map overlay in the Google Earth generated overview page shows sedimentary units more or less paralleling the rocky mountains with late Paleozoic units in **blue**, Paleozoic - Mesozoic units in **brown** and Mesozoic units in **green**. Other colors without a general North-South trend indicate the metamorphic and igneous crystalline systems of the Rocky Mountains

Clickable “hotspots” are indicated by the typical “fingered” mouse cursor. Thus clicking on a name of a STOP in the overview page will show a close-up Google Earth view.



The camera icon between STOPS will show a Google Earth birds-eye travel video between the stops indicated.

GETTING AROUND AT EACH STOP

| | |
|---|--|
| Stratigraphic Section | Many field stops have a stratigraphic section that will pop-up when the indicated label is “clicked”. These stratigraphic sections can be freely repositioned and can be left open during the entire tour. |
| Image Zooming | Many images including the 360° panoramas can be zoomed depending on the viewing device. As default, the “+” and “-” buttons on each tour page can be used. |
|  | “Clickable” animated arrows in a circle will navigate to the next viewpoint in the direction of the arrow. Since the images are 360° views, additional arrows may be behind you. Be careful to rotate 360° to see ALL possible hotspots. |
|   | “Clickable” information symbols will open close-up photographs or other information panels. Be aware that some information will only show if the mouse cursor “rolls-over” them. Otherwise they stay hidden as not to clutter the field of view. |
|   | “Clickable” picture symbols will open photos, graphics, maps or similar. The “clickable” camera symbols will open videos or video lectures of interest. |
|  | “Clickable” door will end the virtual field trip at this particular field stop and will return to the “Virtual Field Trip Overview” page where other field stops can be accessed. |