

INSTRUCTIONS FOR FALL 2017 C82 ASSIGNMENT 2

This assignment was designed to familiarize you with the realities of a 3D planet using the wonderful **Google Earth**. See below for a primer on this program.

Complete the assignment, upload a digital version in bCourses by Monday, Sep. 11 at 11:59 PM, AND print a hardcopy (p. 2–3) to be graded, which you MUST hand in at the first Discussion Section after the digital deadline.

If you already have Google Earth downloaded on the computer you can use it for this assignment and skip to “Using Google Earth”

Downloading Google Earth

- 1) Go to: <http://www.google.com/earth/index.html>
- 2) Click on “Download Google Earth” and follow instructions. You will download a free copy of this software and not the pro version, which you are not required to purchase for this course.
- 3) Open Google Earth

Google Earth (and some tutorials on YouTube)

- 1) Explore the Earth! Click on the Earth and drag it around to see the world's oceans and land masses.
- 2) Double click on a point of interest to zoom in and watch the following YouTube video <http://www.youtube.com/watch?v=vp9hX6OQ8z4> for more navigation tips if you are not familiar with Google Earth.
- 2) To view an image of any place on Earth - Click Search (or Fly To). Type the location in the input box (an address or longitude/latitude coordinates) and click the Search button (or magnifying glass). In the search results (Places panel), double click the location.
- 3) You can hover over a location with your mouse to learn the coordinates/elevation of this site (for that you may have to minimize the “Tour Guide” at the bottom of the window) and you can save coordinates for a location by using the placemark (yellow pushpin) icon and following directions in the this YouTube video <http://www.youtube.com/watch?v=sEpqGIIY04s>
Hint: You can save these placemarks in your places and fly to them quickly later
- 4) To search by coordinate, we advise you to enter (or copy & paste) coordinates in the “Search” or “Fly to” and then click the search button (magnifying glass) next to this box.

If you have further interest in using Google Earth you can find further tutorials produced by Google here: <https://www.google.com/earth/learn/>

Assignment 2 Name: _____ Section: _____

PART I. Oceans

Use Google Earth to explore the globe and find the following oceans.

- (1)** What is the ocean that surrounds Antarctica?
- (2)** What ocean has the deepest point on Earth?
- (3)** What is the ocean on Earth that extends the farthest North and South?
- (4)** What is the Earth's smallest ocean?

PART II. Mapping

Use Google Earth to find the following points of interest then learn about them in your textbook and on government and university websites.

- (5)** Find the coordinates of the following major geologic feature and give the elevation in meters:
 - a)** Puerto Rico Trench:
 - b)** Shark Bay:
 - c)** Gulf of Suez:
 - d)** Mid Atlantic Ridge:
- (6)** Name the feature at the following locations (these are all important for thermohaline circulation of the oceans as we will see later in the course):
 - a)** 59°35'N, 53°26'W; elevation -3310 m:
 - b)** 69°05'N, 4°17'E; elevation -3233 m:
 - c)** 71°26'S, 52°52'W; elevation -1798 m:
 - d)** 77°46'N, 7°33'W; elevation -292 m:
 - e)** 75°39'S, 165°39'W; elevation -2608 m:

(7) What is geological feature found at 11°20'N, 142°12'E (elevation -10,538 m)? What type of plate boundary formed this region?

(8) Name, give coordinates and the elevation of the highest point on Earth. What type of plate boundary formed this region?

(9) What is the name and coordinates of the most remote inhabited island on Earth? What type of island is this?

(10) Why is the institute at 19°32'10.56"N, 155°34'34.09"W (elevation 3399 m) important for the atmospheric sciences?