GOL 105: Topographic Maps Lab II

Objective:
The objective of this lab is to get you comfortable using the information contained on topographic maps to construct a topographic cross-section. Topographic maps present a 2-dimensional view of a 3-dimensional world. By drawing a topographic cross-section, we can visually represent the missing or implied 3rd dimension on the map, that of elevation and topography.

Part I

HALIFAX AND HARRISBURG WEST QUADRANGLES

Draw a topographic cross-section from Powell Creek to Stony Creek using the lined sheets of paper provided with this lab. For the northern end of the cross-section, use the intersection of Powell Creek and Pennsylvania State Route 225 and for the southern end of the cross-section, use the gauging station on Stony Creek. When you have finished the cross section, answer the following questions:

1. What is the elevation and height of Peters Mountain?

2. What is the elevation and height of Third Mountain?

Part II

You are going to make one more topographic cross-section. Choose any topographic map in the room to complete this next portion of the lab. Identify an 8 inch long section on the map that you will use to make a topographic cross-section

1. Give the latitude and longitude for each of the two endpoints of your chosen cross-section.
2. What is the total actual length of the horizontal distance presented on your cross-section based on the maps scale?
3. Locate the nearest benchmark or an obvious landmark nearest your cross-section. Give the latitude and longitude of the benchmark or landmark and directions to the midpoint of your cross-section line from the benchmark or landmark (for example, the mid-point of the cross-section line lies 3.4 km northwest of the benchmark located at 40°26’45”N and 76°58’45”W).
4. Draw the cross-section using the attached piece of lined paper.