Introduction to GIS: Lab 6

Part One: GPS Data Collection

This week, you’ll be using global positioning system devices (your phones!) to identify locations of interest.

You’ll import these locations into ArcMap for mapping and manipulation after the midterm. As you remember from lecture, the Global Positioning System relies on a network of satellites to provide three-dimensional triangulation of your position on the planet. Fortunately, this information can be [relatively] easily exported into a modern GIS, like ArcMap.

For this scavenger hunt exercise, you will visit various features on campus, in your neighborhood, or virtually and record the coordinates provided by your GPS. We will import these features through a spreadsheet transcription in the lab after the midterm, so SAVE THIS INFORMATION! You will need it for the main Lab 5 exercise.

**Part 1A:** GPS Device Use Instructions

**Objective:** Learn how to use your phone as a GPS device.

**Part 1B:** GPS Scavenger Hunt

**Objective:** Collect some GPS information about features on campus or around your neighborhood. You will collect this data for later transcription, input and use in ArcMap to make your own map.

# Part 1A: GPS Device Use Instructions

1. You can obtain lon/lat coordinates from the mapping apps on your Android or Apple phones. Here are some links to help:
   1. [Get coordinates on Apple Maps](https://appletoolbox.com/get-gps-coordinates-apple-maps/)
   2. [Get coordinates on Google Maps](https://support.google.com/maps/answer/18539?co=GENIE.Platform%3DAndroid&hl=en)
2. Locate coordinates for 5 locations. The descriptions in the table are just suggestions, feel free to select any 5 locations you like but sure to record a description of the places you visit (in person or virtually).

| Place | Coordinates |
| --- | --- |
| 1. A building or other location. Write down a short description. |  |
| 2. A spot with a nice view (take a picture) |  |
| 3. A place to lock your bike. |  |
| 4. A nice tree, preferably with a species ID tag (name the tree). |  |
| 5. A place to sit and eat lunch |  |

# **Part 1B: GPS Scavenger Hunt**

**Use a mapping app on your phone or online to navigate to the following coordinates and describe what you find there:**

| Description | Coordinates |
| --- | --- |
|  | N42.3907, W72.5265 |
|  | N42.3892, W72.5231 |
|  | N42.3892, W72.5272 |

**Hold onto this data sheet, you will use this information for lab 5, part 2.**