# GEOG 432/832: Programming, Scripting, and Automation for GIS

Week 13.02: Investigating spatial autocorrelation

Dr. Bitterman

## Today's schedule

- Open discussion
- Slides, discussion, and exercises
- For next class

## **Open discussion**

## **Building spatial weights matrices**

#### Today's prep:

```
%matplotlib inline
import seaborn as sns
import pandas as pd
from libpysal import weights
import geopandas as gpd
import numpy as np
import matplotlib.pyplot as plt
# new ones below
import esda
from splot.esda import moran scatterplot, lisa cluster, plot local autocorrelation
```

#### Verify all packages are in your environment

...and that you're in the correct environment

## Lab 07 intro

### Today is a (nother) guided exercise

#### calculating spatial autocorrelation

- 1. Download week13\_inclass.ipynb from GitHub
- 2. Download week13data.zip from GitHub
- 3. Setup your environment/data
- 4. Wait

#### For next class

- Lab 7 due next week
- Readings are linked/posted on Canvas...