

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

## **Unit 12.02: Investigating spatial autocorrelation**

**Dr. Bitterman**

# Today's schedule

- Open discussion
- Update presentations
- 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
from libpysal.io import open as psopen
import geopandas as gpd
import numpy as np
import matplotlib.pyplot as plt
# new ones below
import esda
from spplot.esda import moran_scatterplot, lisa_cluster, plot_local_autocorrelation
```

**Verify all packages are in your environment**

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

**Today is a(nother) guided exercise**

**calculating spatial autocorrelation**

## For next class

- Lab 7 due next week
- Remaining update presentations on Friday
- Readings are linked/posted on Canvas...