# Final Project for Stat 21

## Preparation for the Project Proposal

### Who?

List all group members. There will be one group with 4 people. All other groups must have 3 people.

### What?

What kinds of questions can be answered with a multiple linear regression model? (E.g. One could design a MLR model to predict the cost of a road trip as a function of variables such as distance, gas prices, weather, etc.)

What is a topic you and your group mates would like to explore? (E.g. Do you share an interest in government policy or preventable violence?) For inspiration, consider the following list of open sources of data:

* [Police Force in US](https://www.accountablenow.com/data-explorer)
* [National Historical GIS](https://www.nhgis.org/about-ipums-nhgis) (Geographic Information Systems)
* [Urban Institute Data](https://datacatalog.urban.org/search/type/dataset)
* [Delaware County Homicide Data](https://delcohomicides.swarthmore.edu/)
* [Swarthmore Institutional Data](https://www.swarthmore.edu/institutional-research/survey-findings#Staff%20Check-In)
* [Our World in Data](https://ourworldindata.org/)
* [Institute for Social Research](https://www.icpsr.umich.edu/web/pages/ICPSR/index.html) (ICPSR)

### How?

What does your data look like and how will it be collected (e.g. group members collect data on themselves or their friends, find and clean data available online, create a data set by looking up facts online)? Is your response variable numeric? What are your observational units (e.g. people, cities, random minutes in a day, etc)?

### Why?

The purpose of this project is to give you hands-on experience with statistical modeling. The purpose is NOT for you to create a statistical model that works perfectly and has only statistically significant predictors. You and your group mates will be graded on the logic behind the process of developing and evaluating your model. You will NOT be graded on whether or not your model is usable in the end but you will be graded on the accuracy and validity of the conclusions you draw about the usefulness of your model.