**Provide the ABSTRACT or SUMMARY of your anticipated project. Your PROPOSAL should be about 250 words and include how your project will incorporate literature, methods, or approaches from more than one academic department or discipline. Your TIMELINE should outline your anticipated plan for completion with the anticipated month/date of the major milestones for your project including meeting with your faculty mentor and the scholarly presentation or defense venue and date.**

Green stormwater infrastructure (GSI) manages runoff from wet weather events in a more ecologically friendly and effective way than grey stormwater infrastructure. It uses soil, plants, and other elements to restore the natural absorption processes typically absent in urban environments that are covered in impervious surfaces. Philadelphia currently has mostly grey infrastructure and experiences combined sewer overflows (CSOs) during rain events. CSOs discharge untreated sewage into waterways to prevent overloading of wastewater treatment plants. There are many negative public health implications from CSOs. GSI may decrease the frequency of these events, helping to prevent the exposure to bacteria and toxins that CSOs can cause. Because GSI often means more greenspaces in the city, it can provide health benefits. There are also positive economic outcomes due to the jobs created from building this infrastructure. Philadelphia’s recent Green City, Clean Waters (GCCW) initiative is a 25-year plan to use GSI to manage stormwater. GCCW includes upgrades to existing water treatment plants and investments in new GSI infrastructure.

The objective of this research is to xxxxxxx

The research will include a literature review to understand the potential environmental, social, economic and health benefits of each type of infrastructure. In addition, I will use mapping? as well as to study mapping techniques used in similar exposure studies. The Philadelphia Water Department provides maps and other information on their website about the project’s progress. The availability of this and U.S. census data allow for the populations near the new infrastructure to be analyzed for xxxx. This project will look at the distribution of green stormwater infrastructure in Philadelphia using GIS mapping techniques to evaluate the GCCW initiative through an environmental justice lens.

Timeline  
October 31: Finish literature review about GSI

November 30: Finish literature review about mapping techniques

January 18: Finish collecting and analyzing data

Week of January 20: Meet with mentor to go over findings so far

January 31: Finish first draft of paper

Week of February 3: Meet with mentor to go over first draft

February 21: Finish final draft of paper

February 28: Final abstract due

March 13: Finish first draft of presentation

Week of March 16: Meet with mentor to go over presentation

March 27: Finish final presentation

Mid-April: Presentation/defense