Capstone Project

The Capstone Project is the core purpose of this course. We will spend the semester developing it.

Due dates

Project due date: **5pm on Friday, April 29**.

Deliverable

The final deliverable can take many forms, but at its core should be a GIS analysis targetted to answer a clear question or solve a specific problem.

Deliverables can include

- Research paper on a topical question
- Research paper on GIS methodology
- Dashboard
- GIS tool

The final deliverable **must include all three of the below items**:

1. A written report of the question, background context, results, and methodology/technical implementation.
2. A GitHub repo complete with all data, scripts, and outputs.
3. An in-class presentation (10 min + 5 min Q&A).

Important

- You can use multiple repositories if you'd like to separate your write-ups from your code. All repos should be either in the GitHub Organization for the class, or public.
- Be sure to include the names of everyone who worked on the final project somewhere in the README, etc!

Guidelines

The project is open-ended. However, it should be sufficiently sophisticated for a semester-long course.

As a rule of thumb, consider projects that...

- Could be submitted to a conference as a paper.
- Can be provided as a code library to other GIS analysts.
- Can be provided to a practitioner to solve a need.

Projects should demonstrate all of:

- Subject matter background research and motivation.
- Coding completeness and sophistication.
- Analytic clarity and appropriateness (is your analytic methodology answering your question?).

Group projects

Group projects are permitted, **with a maximum number of group members of 2**.

Grading

The final project is worth 50% of the final grade, and the presentation another 25%. These will be graded on four criteria:

- **Concept**: Is it sufficiently complex/challenging/sophisticated? Is the final product useful/interesting/creative?
- **Technical implementation**: Was it well thought out? Was each step done correctly? Does it work as described? Is it consistent with the proposal?
- **Writeup**: Is all of the above explained clearly? The writeup should be a multi-page document that explains in depth all aspects of the project's implementation as well as the final results.

Examples from Past Semesters

You can find examples from past years here:
https://github.com/CPLN-680-Spring-2022/Class-Resources/tree/main/resources/examples

This document was adapted from Nick Hand's generous MUSA 550 example.