

## **GEOG 481 Geographic Information Systems Project**

Building on the knowledge and skills acquired in GEOG/PLAN 281, 381, and 387, students develop and answer a research question that involves the use of geographic information systems (GIS). While the course is structured around a set of specific deliverables, listed in the section titled Schedule, it can broadly be divided into the following three parts: a proposal, project implementation, and a final paper. The first part of the course focuses on developing a research question and demonstrating how it will be achievable to answer, within the timeframe of the course, in the format of a project proposal. The second part of the course involves implementing the proposed project and overcoming unanticipated challenges. The instructor facilitates project management through meetings with individual groups that collaboratively define tasks for completion and assess the completion of previously defined tasks in a submitted weekly progress report. The third part of the course focuses on understanding the structure of scientific publications and learning how to write a scientific paper.

This course is for you if you want a challenge to see a project through from hypothesis design to deliverable. Work in teams to develop methods to provide solutions for real-world problems.

NOTE: The course carries a weight of 1.0 and is equivalent to two standard undergraduate courses. Effectively this means that you should expect to complete the same amount of work as was done in GEOG/PLAN 381 and 387 combined.

### **Transition to Online**

As the course is largely based on group work, scheduled time periods will be maintained for lectures, group meetings with the instructor, and for online “lab work”. The meeting times will be used to discuss research questions, project proposals, overcoming challenges, discussing new techniques and completion of the project. Communication within groups will be the responsibility of students – it is suggested that the scheduled lab times be used for virtual collaboration using online meeting applications (Bongo, Skype, Zoom) and the remote desktop virtual machine for accessing ArcGIS.

Course evaluation consists of individual and group submissions, including the presentation of research interests, project choice, project proposal, proposal presentation, paper presentation, project submissions and group evaluation. In addition, weekly progress reports will be submitted to the instructor. All presentations will be made to the class during the scheduled lecture time.