

## Geography 364 – GIS and Community Partnerships (Fall 2017 )

**Faculty:** Holly Barcus

**Lab Instructor:** Ashley Nepp

**Lecture:** Tu/Th 3:00-4:30; Car 108

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Or by appointment

**Office Hours:** M 3:30-4:30pm; T 1-3:30pm;  
F 9:30-10:30 or by appt

### Course Description and Objectives

Designed as a sequel to the introductory course in GIS, this advanced GIS course covers the basic principles and ethics that we employ as geographers when we work collaboratively with community partners. The primary goal of this course is to learn how to work cooperatively with a community partner to successfully complete a GIS project. This project is defined and guided by our partner, although we, as consultants, also work to shape the project into a meaningful learning experience that contributes to the mission of our partner. Our partner for this semester will be the Twin Cities YMCA. We will be working with this organization to map and analyze questions of water quality and land suitability for this organization. The project will include field excursions to the site, guest lectures and lots of mapping. We will spend the first few weeks of the semester learning about community partnerships and adding a few new technical tools to our toolbox, as well as learning about the YMCA, their mission and the project on which we are collaborating. Following this initial period we will focus very specifically on completing the project.

### REQUIRED TEXTS

- There are no required texts for this course.
- The reading list for this course can be found on the Moodle course page.

### COURSE REQUIREMENTS & GRADING

**Attendance** will be taken during each class period and is counted towards your overall participation grade. Since this is a collaborative project, it is important for everyone to be in class

during scheduled times to facilitate this collaboration. Please BE ON TIME to avoid disrupting the class.

Your active participation in this class is key to making it interesting and relevant to your own experiences. My experience is that students who fail to attend regularly also fail to successfully wed the conceptual and theoretical components of GIS with the applied technical requirements.

You are also expected to attend the weekly lab meeting for which you are registered. Most of the material covered in lab is not easily made up if you are absent. If you are absent from lab for any reason (excused or unexcused), it is **your** responsibility to obtain the information you missed.

**Lab Assignments** – We will work through several labs to enhance your skills and to prepare you for the project. Your lab assignments are graded first on whether or not you obtain the correct “answer” to the lab. Secondly, you will be responsible for providing feedback on one of your classmates’ final maps. In this course, we are interested in constructive feedback on map design and focus less on formal grading of the maps. Peer-assessment of your maps with the aid of a map design rubric, will help you develop critical map design skills as we progress through the class.

**Other Assignments** – As an interactive, project-based course there will be several additional assignments over the course of the semester that relate specifically to our project. You will have sufficient notice and description of these assignments.

**Applied Group Project** – This semester we will be working with members of the YMCA of the Twin Cities to prepare and map data and conduct analyses for their projects, which we will discuss in detail in class. We will discuss the details in much more depth as we progress through the semester.

**Incompletes** – Incompletes will be given according to Macalester policy. That means it will be given only to students “who have encountered difficulties beyond their control that have hindered their academic progress.”

**Journals** – For this course you are required to keep a journal of your thoughts and reflections over the semester. The purpose of the journal is for you to spend time reflecting on your experiences in the class in general and our collaborative project specifically. I will announce when each journal entry is due and if there is a specific question that I would like you to address. I do not grade the content of the journal. It is my hope that you will honestly consider the progress of the applied group project and your individual learning, and the class as well, and use the journal as a tool for exploring the challenges and rewards of group projects and collaborative partnerships.

### **Make-up and Late Assignments**

- **Assignments** – Late assignments will be accepted for partial credit only.

## **Classroom policies**

**Courtesy** – The first and most important classroom policy is to BE COURTEOUS! This includes:

- If you arrive late or need to leave early, do so with a minimum of disruption.
- Please turn-off all cell phones, etc. during class.
- Be polite when others are speaking, there is enough time to discuss all perspectives.

**Computers & GeogNAS** – Everyone will be assigned a username & password that allows you to access the GIS data drive and a space to backup your project work. You will also be expected to make use of the lab outside of regular class time to work on your assignments and projects.

**Course Information** – A fair amount of course information will be disseminated via Moodle and email. Please be sure to check your Macalester email account and the Moodle page regularly.

**Lab Hours** – Lab time will be used to demonstrate cartographic and GIS applications using ESRI's ArcGIS 10.5 software. You will be expected to complete most lab assignments on your own time outside of class. TAs will be in the lab during certain hours to help you. I have posted the open lab schedule on the course Moodle page and on the door of the lab. Please do not leave your lab work until the last minute – the lab may not be available and systems do crash from time to time. Also, please note that the lab is a “teaching lab” and not a general computer lab – i.e. it is not the place to check email, write papers, etc. GIS assignments take priority during open lab times. **As a member of the Advanced GIS class, you will be given additional lab privileges, including extended hours and access to the lab. Please do not abuse these privileges.**

**Lab Rules** – There are specific policies about lab conduct. You will be asked to sign a lab contract that states that you will abide by the following lab rules:

1. Do not bring FOOD or BEVERAGES into the lab; beverages in containers must be kept closed while in the lab
2. Work only on the C: drive and save all files to your personal workspace; backup your work to GeogNAS or other cloud storage frequently!
3. Print only color maps on the printer. No written assignments - even for this class (these can be printed in the library).
4. Obtain permission from Ashley before downloading programs to the computer and before using any contract data off the P: drive
5. Silent your cell phone at all times while working in the lab
6. This is a shared workspace designated for GIS students and classes; there are many students who need time in this lab so please keep the use of Facebook, YouTube and other unrelated programs to a minimum.

**Office Hours** – Office hours provide a great opportunity to discuss questions, issues, or concerns about the class or to just talk about GIS. Feel free to stop by during office hours or schedule a different time to meet, if your schedule conflicts with the posted office hours.

**Participation** - This is an interactive class in which we work together to complete a project of importance to our partner. As such, we will engage in a range of readings, exercises, labs, and

discussions as well as plenty of hands-on mapping and analysis using a GIS. Please come prepared to participate in each daily activity. In this course Ashley and I define participation as attending class regularly and coming on-time, asking questions, contributing to discussions, being prepared (this means doing the readings and exercises *before* coming to class) and generally being intellectually engaged with the material. We also want to emphasize the importance of communicating with us, with our partner, and with your classmates.

**Academic Integrity** – Cheating and plagiarism are unacceptable and dishonest. In this class I expect you to complete and turn in your own work and to follow established academic practices regarding proper use and citation of materials and ideas that are not your own. Engaging in cheating or plagiarism will result in a failing grade in this class. If you have questions about what constitutes plagiarism or cheating, please see me.

**600 point grading scale**

- 70 = Participation
- 30 = Journals (5pts per entry (~6 entries))
- 400 = Applied Project  
(includes group work, individual maps, contributions to the final report and presentation)
- 100 = Lab Assignments (3 lab assignments at 25 points each PLUS one map design grade at 25 points)
- 25 = Reflection paper

A	93-100%	B	83-86%	C	73-76%	F	Below 60%
A-	90-92%	B-	80-82%	C-	70-72%		
B+	87-89%	C+	77-79%	D	60-69%		

**General Schedule: Dates are approximate – we will adjust as needed.**

<b>Week</b>	<b>Date-Day</b>	<b>Topic</b>	<b>Readings to Complete Before Class (all readings are available on Moodle)</b>	<b>Notes &amp; Assignment Due Dates</b>
<b>1</b>	5 Sept	Welcome! Thinking about a collaborative GIS project, Lab Logistics, and <b>Lab 1: Review</b>		
	7 Sept	A visit from our partners from the YMCA	Readings: 1. YMCA Overview 2. Visible Cities (from YMCA)	
<b>2</b>	12 Sept	What is PPGIS & Civic Engagement?  Project Planning and Design, divide into project groups and identify data to be collected  Decide on timeline and workflow	Readings: 1. Brown & Kyttä; 2. Schlossberg and Shuford. 3. Workflow handout	<b>Lab 1 due</b>
	14 Sept	<b>Assign Lab 2: Data Source Lab</b>		
<b>3</b>	19 Sept	Group work: Data collection and download		
	21 Sept	Continued data collection		Journal 1 due

4	26 Sept	<b>CLASS FIELD TRIP - this is a required field trip. More details to follow</b>		
	28 Sept	Data Briefings (from Lab 2)  Assign Lab 3: Select an analysis method or new tool to explore and complete the tutorial		<b>Lab 2 due</b>
5	3 Oct	Work Period		
	5 Oct	Work Period		Journal 2 due

6 (MAC External Review)	10 Oct	Analysis Briefings (from Lab 3)		<b>Lab 3 due</b>
	12 Oct	Work Period		
7	17 Oct	Prepare to meet with Amanda; Map Critique	Give some thought to how we should organize this mid-semester update for our partners.	Each person should have at least one (and likely more) map complete. Use Ashley's map design check-list.
	19 Oct	Mid-Project meeting with Amanda		Journal 3 due
8	24 Oct	Discuss meeting with partners and decide on next steps		
	26 Oct	<b>Fall Break</b>		
9	31 Oct	Work Period		
	2 Nov	Work Period		Journal 4 due

10	7 Nov	Work Period		
	9 Nov	Organizing the final report and division of tasks; Work period		
11 (Holly Away: External Review)	14 Nov	Final analysis and write-up		
	16 Nov	Final analysis and write-up		Journal 5 due
12	21 Nov	Final Map Critique Full Report Draft Due to Holly at 5 p.m.		Full Draft Report Due at 5 p.m.
	23 Nov	<b>Thanksgiving Break</b>		
13	28 Nov	Work Period		
	30 Nov	Practice Presentation in class		
14	5 Dec	Final Presentation to YMCA		
	7 Dec	Discussion: How did it go? Final Report Due Friday @ 5pm		Journal 6
15	12 Dec	TBA		** Reflection Papers due on Monday, 19 Dec at 5pm
16	20 Dec (Wednesday)	Final Exam Period, Course Eval and Data Backup, Wednesday 10:30-12:30		