

GEOG 796/GSS 896: Crowdsourc Mapping

Shane Bradt & Joel Hartter

Instructor Information

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Communication Policies

Your instructor will be online each day Monday-Friday from 8am-5pm EST and we will answer emails during this time. If you email after hours or on the weekend, you will receive a response the next working day.

Online office hours using the Blackboard Chat tool from **7-9pm EST Tuesday and Wednesday**.

Since this is an online course, the best way to get a hold of us and ask questions is through email or to join the online office hours.

- Please include "GEOG 796/GSS 896" in the subject so that your message is not treated as junk mail.
- Provide your first and last name in the email

Instructor Bios

Shane Bradt is an Associate Extension Specialist in Geospatial Technologies and an Associate Extension Professor in Biological Sciences at the University of New Hampshire. Shane started as a Masters student at the University of New Hampshire in the Zoology Department in 1997. After a variety of grad degrees and jobs at UNH, he began his current position at Cooperative Extension in 2006. He also became a member of the Department of Biological Sciences in early 2013. Shane's job in Cooperative Extension is helping both people outside UNH and students at the university to understand and learn how to use geospatial technologies, particularly GIS and GPS. His research background includes work on lake and watershed ecology, cyanobacterial toxins, and the use of remote sensing to monitor lakes.

Joel Hartter is an Associate Professor and Associate Director for Professional Education in the Environmental Studies Program at the University of Colorado. For the last 12 years, Joel has worked in national parks and the communities that surround them in Uganda, exploring issues of conservation management, climate change, health, community development, migration, and resource extraction. He has also worked on forest management and wildfire in communities of the

Intermountain West. For all of us his work, Joel uses geospatial technology as a tool to address his research questions. Joel has used mapping tools of all sorts to work with communities, communicate results, to allocate resources and identify priority areas for management

Course Description

Until recently, virtually all geographic information was produced in the form of maps and atlases, by mapping authorities, agencies, and corporations, and then dispersed to users. Traditionally, GIS has emphasized mapping and analyses based on layers produced with a high degree quality control (which are infrequently updated in most cases), but in the age of Web 2.0, input from users has been increasingly utilized for emergencies and everyday use (e.g., Google Maps, OpenStreetMap, Wikimapia). In this course we will use crowdsourcing, a task that is outsourced to the general public that is typically performed by a skilled professional, to fields outside software and business (e.g., Threadless) to collect geographic information. Locational crowdsourcing or VGI is one of the most exciting new areas of data generation and delivery of geographic information in response to emerging situations, where citizen volunteers contribute geographic data (locational crowdsourcing), but more than just GPS data, such as geotagged photos.

Objectives

This course will focus on the application of locational crowdsourced information as well as qualitative information (e.g., digital photos) to use real-world examples, where we can apply the technology and applications anywhere. The course will incorporate concepts from geography, history, anthropology, sociology, planning, information science, and disaster management. Students will learn about the ongoing process of data acquisition and problem conceptualization. Rather than work to produce a static result, students will be encouraged to think about how they will incorporate changes, update and refine their analyses, and successfully navigate a dynamic temporal and spatial setting. This course will be a hands-on and lab-based to introduce concepts of locational crowdsourced information, and teach them how to capture and use data.

Specific objectives:

1. Define crowdsource mapping and volunteered geographic information and their applications.
2. Explain and critically evaluate the utility of crowdsource mapping of each component that comprises a project.
3. Practice creating different types of maps using different mapping applications.
4. Examine privacy, ethics and validity associated with crowdsourced data.
5. Synthesize and integrate new and existing data to create a relevant, real-time visualization of geographic information.

Overview

Unlike the traditional face-to-face classroom setting, this course will be **taught exclusively online**, with no scheduled classroom or online appearances. Thus, you have the flexibility of accessing course materials 24 hours a day and can complete the course on your own time. Be aware of all assignment due dates.

Required Texts & Materials

There is no formal text for this course. All readings, videos and other course materials will be posted online through My Courses.

We will be using various Google products. All students must have a Google login.

We will be referencing a number of applications. Examples will be presented in class and you may choose to use some of them in your project and homework. You may then have to set up your own accounts.

- OpenStreetMap
- Google Earth/Maps
- ArcGIS Online

We will also reference social media as sources of data. For example: Facebook, Twitter, Flickr, SMS messages

Grading Criteria

Homeworks 1-4: 10% each, total = 40%

Reflection: 5%

Project Proposal: 10%

Project: 45%

We use the following table to assign letter grades.

95-100% A	87-89% B+	77-79% C+	67-69% D+
90-94% A-	83-86% B	73-76% C	63-66% D
	80-82% B-	70-72% C-	60-62% D-
			below 60% Fail

Submission Policies

All assignments must be turned in at noon on their due dates to receive full credit. Each assignment will receive a time stamp, so we will know when you turned it in. There are no bonus points for finishing early.

Late assignments: 10% will be deducted for each 12 hours the assignment is late. For example, if you turn your assignment in between noon and 12:01pm the next day (12 hours), you will receive an automatic 10% reduction. For the next 12 hour window, there will be another 10% reduction and so on.

Each assignment will have different submission guidelines, so please read the assignment descriptions carefully. The written responses must be formatted to 1" margins, 12-point Times New

Roman Font, single line spacing. These will be submitted electronically directly via My Courses. Other assignments must be submitted with an email to both instructors (joel.hartter@colorado.edu and shane.bradt@unh.edu) with a link to their completed assignment.

All assignments will be due on either Monday, Wednesday or Friday. Students should expect feedback by Tuesday of the following week for an assignment submitted on Friday, or within two days if the assignment was submitted on Monday or Wednesday.

Netiquette Policies – Expectations of Good Behavior Online

Distance education can give a false sense of anonymity in terms of the consequences of what we are doing. As a result, many people feel less inhibited in online situations than in their everyday lives. This heightened sense of inhibitions sometimes leads people to use less than their usual sense of personal respect for each other when communicating online. As a result, online communication guidelines have developed over the Past few years. This informal set of guidelines for online behavior called **Netiquette**. Netiquette can be summarized by three simple understandings: remember that there is a human being on the other end of your communication, treat that human being with respect, and do not transmit any message that you wouldn't be willing to communicate face to face.

1. **Always think before you write.** In other words without the use of non-verbals with your message, your message can be misinterpreted. So please think twice before you hit submit.
2. **Keep it relevant.** There are places to chat and post for fun everyday stuff. Do not stray from the discussion in the assigned questions.
3. **Never use all caps.** This is the equivalent of yelling in the online world. It is not fun to read. Only use capital letters when appropriate.
4. **Make sure that you are using appropriate grammar and structure.** Online messages can be quite informal, but try, nevertheless, to express yourself using proper spelling, capitalization, grammar, usage, and punctuation. Spell check your postings and email.
5. **Consider your audience, and use language that is appropriate.** Excessive use of abbreviations or slang in a nontechnical chat room, for example, can be bad manners, and remember your peers may not understand your chat abbreviations. Avoid offensive language.
6. **Treat people the same as you would face-to-face.** In other words it is easy to hide behind the computer. In some cases it empowers people to treat others in ways they would not in person. Remember there is a person behind the name on your screen. Treat all with dignity and respect and you can expect that in return.
7. **Respect other people's intellectual property.** Don't post, display, or otherwise provide access to materials belonging to others, and cite references as appropriate.

Technology Requirements

You need a consistent, high-speed Internet connection to view the lecture videos and the other content in this course. When you take quizzes, we recommend you use either a desktop computer or a laptop in a quiet location with a secure connection. If you have access to a high-speed wired connection, that's preferable to a wireless connection. We recommended that you have installed the latest versions of Adobe Flash, Adobe Reader, and QuickTime.

Microsoft Windows

- Windows XP (Service Pack 2), Vista, or Windows 7 and above
- Minimum 2GB RAM
- High speed internet connection: 500 kbps or above (Cable, DSL, FiOS)
- Working soundcard and speakers/headphones
- Mozilla Firefox browser is recommended with Java and cookies enabled (Internet Explorer 10 and 11 are not supported by Blackboard)
- Sun Java Runtime Environment (JRE)

Macintosh

- Mac OS X (Lion 10.7 and above)
- Minimum 2GB RAM
- High speed internet connection: 500 kbps or above (Cable, DSL, FiOS)
- Working soundcard and speakers/headphones
- Mozilla Firefox browser is recommended with Java and cookies enabled

Sun Java Runtime Environment (JRE)

Technical Support

If you have problems using My Courses or your computer, call (603) 862-4242 Monday through Friday between 8:00 am to 4:30 pm EST, or check out the **myCourses Technical Support for Students** in **Welcome to myCourses** in the **Modules** section of our class.

We understand that there will be issues, questions, and technical difficulties that arise. We will be using software and applications that are web-based and not hosted by the University of New Hampshire. Thus, there may be times when we cannot answer the question or the software may be updated during the time when you want to work on your homework. Unfortunately, we cannot control those instances because we are using publicly available platforms. We will work hard to resolve the issues, but there are times when students are trying to do something with the software or create a map that may require additional knowledge. Students are expected to be proactive to help themselves in trying to remedy their issues through message boards, online forums, calling tech support, and discovering online help materials.

Further Resources and Information

- UNH's Center for Academic Resources in Wolff House provides numerous resources to help you meet your academic goals, including drop-in tutoring and help with time management, note taking, studying, and test taking.

- If you are a student with a documented disability who will require accommodations in this course, please register with the Access Office in the Memorial Union Building, Room 118 (862-2607) for assistance in developing a plan to address your academic needs.

Academic Misconduct

Please note the University has no tolerance for students who break the University Academic Honesty Policy. Please see the Students Rights, Rules, and Responsibilities Handbook for a full description (<http://www.unh.edu/student/rights/srrr0708.pdf>). All students are expected to abide by these rules without exception.

Plagiarism, misrepresentation, and cheating are academic crimes and will not be tolerated in this class. Never (1) turn in an assignment that you did not write yourself, (2) turn in an assignment for this class that you previously turned in for another class, or (3) cheat on an exam. If you do so, any of these actions may result in a failing grade for the class, and further ramifications at the University level.