

**GEOM 3007A: Cartographic Theory and Design**  
**Section A - Winter 2021**

**Department of Geography and Environmental Studies, Carleton University**

Instructor: Peter Pulsifer, PhD  
Office: Loeb Building A327  
Office Hours: Mondays 10:30 – 11:30 AM, or by appointment  
e-mail: [peter.pulsifer@carleton.ca](mailto:peter.pulsifer@carleton.ca)

Teaching Assistant: TBA

**Course Electronic Resources:**

cuLearn (<http://culearn.carleton.ca>) and log in using your student account.

**Course Calendar:**

Synchronous Lab Session      Mondays      11:35 AM to 1:25 PM By Zoom  
Asynchronous Lecture Session Wednesdays 11:35 AM to 1:25 PM By Zoom  
Weekly online content available at the start of this session

**Calendar Description:**

Principles of and issues in cartography, cartographic communication and map design; practical aspects of cartographic representation using multimedia and online mapping.

Includes: Experiential Learning Activity

Course prerequisite(s): [GEOM 1004](#) or [GEOM 2007](#) or permission of the Department

Lectures and laboratory four hours a week.

**Course Objectives**

- Develop both theoretical and practical knowledge in thematic cartography including descriptive statistics, data classification, mapping techniques, design concepts, multivariate mapping
- Get *extensive, hands-on practice* in making cartographically correct, attractive maps and figures incorporating maps, graphs, figures, images, etc.
- Gain exposure to the concept of critical cartography
- Gain experience in online mapping, web mapping and alternative maps.

## **Required Textbooks (available at or online through the MacOdrum Library and online):**

Krygier, John, and Denis Wood. Making Maps : a Visual Guide to Map Design for GIS . Third edition. New York, NY: The Guilford Press, 2017. Print.

Permalink:

[https://ocul-crl.primo.exlibrisgroup.com/permalink/01OCUL\\_CRL/1gorbd6/alma991022759510205153](https://ocul-crl.primo.exlibrisgroup.com/permalink/01OCUL_CRL/1gorbd6/alma991022759510205153)

How to Lie with Maps, Mark Monmonier, 3rd edition – published in 2018. **Older versions are out of date!** You can purchase this textbook on amazon: <https://www.amazon.ca/How-Maps-Third- Mark-Monmonier/dp/022643592X/> or at the bookstore. This textbook will be placed on reserve at the MacOdrum Library.

Any additional course material will be made available on cuLearn.

## **Course Evaluation:**

The grade weighting will be as below:

Lecture, lab and online participation:	12%
Laboratory assignments:	48%
Mid term quiz:	10%
<u>Final project and presentation</u>	<u>30%</u>
	<b>Total 100%</b>

## **Course Format and Overview**

Due to the switch to all-online courses, this course is designed using a blend of content and activities that worked well in previous years and a hybrid online delivery model. Each week will include an asynchronous component (pre-recorded material) and a synchronous session (Mondays 11:35 – 13:35) for full group participation. The synchronous session will usually be used for practical lab sessions or student presentations, however some sessions will include review of lecture material or assigned readings.

As with most classes at Carleton this year, this will be a big transition from how the course has been run in the past, and there will likely be challenges to work out through the term. At the same time, many people are dealing with new and elevated stresses in their personal lives while coping with the pandemic and associated public health measures. We encourage everyone to employ a combination of patience and open communication so that we can all help each other out. Please do not hesitate to contact the instructor if anything is preventing you from participating properly in the course as designed. There are many things beyond our control, but reasonable modifications will be made wherever possible.

Please also recognize that the switch to online learning creates potential privacy problems that were not issues in the past. When we participate in synchronous video calls and we have cameras

on, we are opening windows into our homes. Please respect that fact with all your fellow students and instructors. Do not record people without their permission, and do not distribute recordings that we make available to anyone outside of the course. Remember, it's not just the course materials any more, now it is also recordings of what was said and seen and shown by all of your classmates. If you have any concerns about privacy, don't hesitate to bring them up.

Some of you have already made me aware of potential problems with uniformly participating in the synchronous portions of this course. Due to the practical nature of much of what we will cover, it will be very difficult or impossible to successfully participate completely asynchronously in this course. At the same time, I recognize there will be challenges and will work with you to provide flexibility. Some of this will likely involve the recording of synchronous sessions. We ask all students to provide permission for these recordings, under the conditions outlined above, i.e. that the recordings only be used for the purposes of reviewing or getting caught up while taking this class.

### ***Requirements:***

Students are generally expected to provide their own computer for the practical work in this class. Most of the lab work will use open source software (i.e. QGIS) that can be downloaded and installed on your computer.

If students would like to use other software such as ArcGIS for their term project, for example, off-campus access to the software may be possible through the use of CU Desktop (<https://carleton.ca/cudesktop/>) or by installing the software on your computer system (see <https://library.carleton.ca/help/arcgis-desktop-installation-guide>).

The exact computing requirements and recommendations will necessarily be a work in progress, since we anticipate learning new restrictions and fixes as we test the software and then bring the students in as the term begins. We will document this evolving advice at <https://carleton.ca/geography/computing-requirements-for-dges-courses/#GEOM3007>

### ***Attendance***

**Each week** attendance will be taken (at any time during the synchronous period). You must contact the instructor before an absence to provide an explanation and arrange for an alternate method to cover the material missed.

### ***Lab Assignments***

**Each week** the synchronous period that will be used to complete the lab assignments (6 assignments @ 8% each). The lab assignments may require you to spend time outside of the lab period to complete them. Due dates are indicated in the detailed schedule provided as a separate document. The assignment reports must be submitted before the start of the lab session on their due dates. *Please note the penalty for late assignments (below).*

## **Final Project**

There will be a project (30%) on thematic mapping with your choice. On week 11, students will present their work during the lecture period and submit a report and all the files needed for working on the project by the last week of the classes. Please note that there will be a penalty for late project submission.

## **Mid Term Quiz**

A mid term quiz will occur before the reading week and will be based on the lecture material from previous lectures in the course and any reading material assigned prior to the quiz. The quiz will take 45 minutes in the synchronous period. Lab material will be presented after the quiz.

### **Policy on late assignments/projects:**

In the spirit of compassionate grading during the COVID-19 era, some credit will be given for late assignments. The penalty for late assignments is 15% deduction in grade per day beyond the due date and time. Assignments more than two days late will be marked (i.e. given comments) but no grade assigned. Exceptions will be made with an acceptable medical note in keeping with the current policies of Carleton University. Medical notes must be provided to the instructor prior to the last day of class in order to receive grades on missed assignments.

Standing in the course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

### **Instructional & Conduct Offences:**

Instructional offences include, among other activities, cheating, contravening examination regulations, plagiarism, submitting similar work in 2 or more courses without prior permission, and disrupting classes. Conduct offences apply in areas of discrimination and sexual harassment. Further information about University regulations which define and regulate these offences is presented in the Undergraduate Calendar:

<http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>

Plagiarism is a serious offence and will not be tolerated. Plagiarism is the submission of someone else's writing/ideas/work as your own. All ideas presented which are not your own must be properly referenced. All plagiarism offences result in mandatory reporting to the Dean's office. You will often be working collaboratively to prepare for an assignment and possibly to collect data, but unless you receive specific written instructions to do otherwise, ALWAYS write your assignments and tests individually. Never include others' writing or other materials into your work without proper attribution. Including your own work from previous assignments or other courses, without proper attribution, is also considered plagiarism.

Plagiarism is defined as "presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one's own. This can include:

- reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source;
- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another's data or research findings;
- failing to acknowledge sources through the use of proper citations when using another's works and/or failing to use quotation marks;
- handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs."

## **Academic Accommodations:**

Carleton provides academic accommodation to students for reasons of disability, religious observance, pregnancy and/or parental leave, sexual violence, and student activities. Providing accommodations simply means providing alternatives to students who cannot perform the essential requirements of their academic programs due to the reasons mentioned above. At no time does academic accommodation undermine or compromise the learning objectives that are established by the academic authorities of the university. This page provides only a brief overview of the accommodations policy and process. Please contact Equity and Inclusive Communities for a full explanation.

## **Religious Observation**

A request should be made in the first two weeks of the academic term, or as soon as possible where the scheduling of an event or activity conflicting with a religious obligation does not appear in the course outline or calendar. A list of multi-faith holy days is accessible through the Equity Services website. Instructors can also contact Equity Services to confirm the eligibility of a religious event or practice.

## **Pregnancy and/or Parental Leave**

Requests for parental leave must be made in writing to the Registrar's Office, or in the case of graduate students, to the Office of the Dean of Graduate and Postdoctoral Affairs. A student who is pregnant may request a temporary modification to her program (e.g., laboratory or field work). The student should meet with the instructor(s). The department chair/director and the faculty dean can assist in the discussion. An Equity Services advisor can also be consulted if a student has questions about pregnancy and/or parental leave.

## **Students with Disabilities**

Carleton is strongly committed to providing access and accommodation for all individuals with identified and duly assessed disabilities. The university has a Senate-approved policy on academic accommodation that forms part of its human rights policy. The policy promotes efforts to accommodate students with disabilities so that they will have the opportunity to meet learning outcomes and be fairly evaluated in their performance. In no case, however, does academic accommodation negotiate away, lower, or remove the academic standards and learning outcomes of any course or program, rule, regulation, or policy at the university. Some students with disabilities may require special accommodations for tests and exams. In these cases, students must present you with a signed accommodation form from the Paul Menton Centre detailing their accommodation needs well in advance of the date of an exam. A copy of the Paul Menton Centre accommodations policy can be found [here](#).

## **Survivors of Sexual Violence**

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit [carleton.ca/sexual-violence-support](http://carleton.ca/sexual-violence-support).

## **Accommodation for Student Activities**

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the policy: <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>