

GEOGRAPHY FINAL COURSE OUTLINE: WINTER 2020

GEOGRAPHY 480 GFC HOURS (3-2)

Cartography and Geovisualization

***Text in red denotes changes as course has moved online**

Section	Days	Time	Location
LEC 01	TuTh	14:00 – 15:15	SA 245
LAB 01	Mo	14:00 – 15:50	ES 407
LAB 02	Tu	15:30 – 17:20	ES 407

Section	Days	Time	Location
LEC 01	TuTh	14:00 – 15:15	Online – Zoom -D2L
LAB 01	Mo	14:00 – 15:50	Materials posted in D2L* Online in D2L
LAB 02	Tu	15:30 – 17:20	Materials posted in D2L* Online in D2L

* TA available via email and in Zoom meetings

Instructor: Dan Jacobson	Office: ES 306
Telephone: 403 220 6192	Email: dan.jacobson@ucalgary.ca
Office Hours: Wednesday 10-11am	Email and Zoom

Teaching Assistant: Sarah St.German	Email: sstgerm@ucalgary.ca
Teaching Assistant: Eleanor Bash	Email: eleanor.bash@ucalgary.ca

Please note: The emergency evacuation assembly point for all classes taught in Science A is Social Sciences Food Court and Earth Sciences is ICT Food Court.

Official Course Description

Focuses on mapping technologies for cartography and geo-visualization. The role of cartography and geovisualization is explored both theoretically, and practically in the communication of spatial data. In lecture and lab-based settings, examines data considerations, map design fundamentals and techniques, map use and interactive design for the communication of geographic information.

Course Objectives

This course focuses on the creation and analysis of cartographic products. The lecture material will provide insights into cartographic representation, geographic visualization and communication. A range of cartographic representations that are data and user appropriate will be created and critiqued. Work will be contextualized within recent debates and techniques in cartography and geovisualization. Students will become skilled at using industry-standard GIS software, such as the ArcGIS® software suite, through weekly computer laboratory exercises and online training.

Course Learning Outcomes

The Department of Geography is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes to which they contribute, and the expected level of achievement.

Course Learning Outcomes	PLO(s)*	Level(s)**
Produce a cartographic product appropriate to a dataset	6, 7	2
Competently employ components of the ArcGIS® software suite and related software packages to map and visualize geographic data	4, 6, 7	2
Select, analyze and evaluate appropriate graphic representation techniques for a range of temporal, attribute and spatial scales	3, 6,7	2,3
Assess, critique and implement principles of map design: including layout, color, symbolization and typography.	6,7	2,3
Implement and analyze data considerations for cartographic processes such as data abstraction, generalization, classification and selection	3,6,7	2,3
Compare different methods, media and mechanisms for map production and re-production.	6,7	3
Create, present, discuss, interpret, and critique cartographic products, in the context of existing literature	3,6,7,8	2
Deconstruct, illustrate and analyze the power, societal, philosophical and gender theories when interpreting map creation, use and evaluation.	1,4,7,8	1

**PLOs = Program Learning Outcomes: 1 = reflect and communicate diverse human-environment perspectives, 2 = identify and explain human-environment processes, 3 = implement sampling, data collection, analyses and communication methods, 4 = analyze spatial and temporal aspects of human-environment systems, 5 = employ knowledge, arguments, and methodologies for solving human-environment problems, 6 = evaluate geospatial data and manipulate it to create cartographic products, 7 = communicate geographic concepts using oral, written, graphic, and cartographic modes, and 8 = demonstrate literacy skills.*

***Levels: 1 = Introductory, 2 = Intermediate, and 3 = Advanced.*

Prerequisites

Prerequisites: 3 units from Geography 231, 380.

Prerequisite skills: Basic working knowledge of generic computer software. This includes, but is not limited to file management, standard office products, such as Microsoft Word, Excel, PowerPoint, or alternative open-source or online equivalents. Experience with other non-ESRI GIS, cartographic software and graphic design software is useful but not required.

Learning Resources

One of the following text is required for this course:

- Kraak, M. J., and F. Ormeling. 2010. *Cartography: Visualization of Spatial Data*. 3rd Edition. Guilford Press: New York, NY. 199 pp. (recommended version).
Available as a book or ebook. (available on reserve at the Gallager Library, Earth Sciences 170)
- Kraak, M. J., and F. Ormeling. 2003. *Cartography: Visualization of Spatial Data*. 2nd Edition. Pearson Education: New York, NY. 205 pp.
- **Available online at the library**

Readings from other sources may be assigned – notifications will be posted on D2L, and additional readings will not require purchase.

Grading (Weighting)

Online training exercises	2%
Participation / Contribution	8%
Short essay based upon readings	8%
GIS lab assignments	70%
One midterm test, in class Feb. 11	10%
Final examination, in class April 14	10%
Final examination, open book, last week of classes	10%

The schedule for midterm tests, online training exercises, and the cartography lab assignments will be posted to the web page on the university's Desire2Learn system (D2L). Deadlines for assigned work, including labs, are firm. Late submissions will receive a grade of zero (0).-* **The late submission policy remains in effect "in principle". However, deadlines will be more flexible to accommodate extenuating circumstances, as the course has moved to online participation and delivery. For example, lack of access to digital resources and problems posed by scenarios relating to the fluid and evolving nature of the Covid-19 situation. Please contact your instructor and TA as soon as possible.**

~~To pass the course, students must receive a passing grade in both the lecture component (i.e., combined scores from the midterm test and final exam) and the laboratory component (i.e., combined scores from the online training exercises and the lab assignments).~~

Documentation for Absences or Missed Course Assessments

Students who miss an in-class term test or assignment deadline will automatically receive a grade of zero (0) for that item in their course grading evaluation. If a student missed the test or assignment because of extenuating circumstances, they must contact the instructor immediately to discuss alternatives to the zero grade received for the missed assessment. Deferred tests or assignments are not normally offered; students should consult with their instructor to determine what options exist to accommodate the missed assessment (see the University Calendar – Academic Regulations under section [G.1.1 Course Assessments and Absences](#) for procedures on missed term tests and assignments).

Documentation is not required for any absence. However, please inform me as soon as you are able regarding the situation that you may be facing.

For information on possible forms of documentation, including statutory declarations, please see <https://www.ucalgary.ca/pubs/calendar/current/m-1.html>

Please refer to <https://www.ucalgary.ca/registrar/registration/appeals/student-faq> for frequently asked questions concerning the provision of a medical note/statutory declaration.

Grading System

96 – 100	A+	77 – 80	B	59 – 61	C-
90 – 95	A	71 – 76	B-	55 – 58	D+
86 – 89	A-	65 – 70	C+	50 – 54	D
81 – 85	B+	62 – 64	C	0 – 49	F

Supplementary Fees

No supplementary fees will be assessed.

Expectations for Writing

Writing skills are not exclusive to English courses and, in fact, should cross all disciplines. The University supports the belief that throughout their University careers, students should be taught how to write well so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a

substantial amount of writing in their University courses and, where appropriate, members of faculty can and should use writing and the grading thereof as a factor in the evaluation of student work.

The services provided by Writing Support Services can be utilized by all undergraduate and graduate students who feel they require further assistance: www.ucalgary.ca/ssc/writing_support/overview.

Recording of lectures

Please consult the instructor prior to recording lectures.

Course-Specific Administrative Policies and Procedures

This section describes the administrative policies and procedures that students are expected to follow for this course. If you have questions or concerns about these policies or procedures, please speak to your instructor immediately.

1. Regular attendance at lectures is strongly encouraged. If you must miss a lecture for any reason, you are not required to contact your instructor. It is each student's individual responsibility to make up the missed material on their own. **Lectures will be delivered synchronously at the class time, material will be provided online for asynchronous viewing.**
2. All materials presented in this course are examinable, including lecture slides, information presented verbally by the instructor during lectures, all assigned readings, supplementary materials posted to the course D2L page, online exercises and lab assignments, etc. **The final exam will be in an open book format.**
- ~~3. One in-class term tests will be assigned on 11 February 2020. A final in-class exam will be assigned on 14 April 2020. It is mandatory that you complete these tests in class. If you are absent on the day that the test is given, you will receive a zero (0) for the test unless you have made arrangements with the instructor prior to the date of the test.~~
4. If you miss an in-class term test or assignment deadline because of extenuating circumstances, contact your instructor immediately on your return to discuss alternatives to the zero grade you received for the missed assessment (see the University Calendar – Academic Regulations section G.1.1 Course Assessments and Absences for procedures on missed term tests and assignments). ***Documentation is not required for any absence. However, please inform me as soon as you are able regarding the situation that you may be facing.**
5. You will be required to complete several assignments during this course. A due date and time will be posted on D2L for each assignment, and these deadlines are firm. If extenuating circumstances arise that will prevent you from completing an assignment by the deadline, you must request an extension from your lab Teaching Assistant at least one business day in advance of the deadline. Late submissions are not accepted. ***The late submission policy remains in effect "in principle". However, deadlines will be more flexible to accommodate extenuating circumstances, as the course has moved to online participation and delivery. For example, lack of access to digital resources and problems posed by scenarios relating to the fluid and evolving nature of the Covid-19 situation.**
6. All assignments must be submitted online through the course D2L page using the appropriate dropbox provided for each of your assignments. ***If you face specific digital limitations please contact the instructor and TA.**
7. The D2L submission system enables you to view your uploaded files to verify that they are correct and complete (if you don't know how to do this, please ask your TA to demonstrate it for you). In this course, **you are required to verify that your uploaded submissions are correct.** Requests to resubmit materials after a submission deadline has passed, or especially after an assignment has been graded, will not be granted – ensure that you have uploaded the correct materials before

you submit your work. ***If you face specific digital limitations please contact the instructor and TA.**

- a. Maps should be uploaded individually in the specified format. A grade penalty may be assigned, for incorrect file format submission.
 - b. Other files in your submission (e.g., data files, etc.) should be zip-archived (.zip or .7z file), especially if there are multiple other files in your submission. If you are not sure how to create zip files, please ask your Teaching Assistant for a demonstration.
8. Your lab Teaching Assistant will be available for consultation and assistance during the scheduled lab period and their scheduled office hours. Your TA is not compensated for their time outside of these hours, so please refrain from seeking their help outside of lab hours or office hours. (Remember, they are students, too, with their own busy schedule and work to complete!)
9. **Plagiarism is a serious academic offence that will be vigilantly monitored and reported in this course.** Essentially, plagiarism can arise whenever a student submits material for evaluation that was not entirely their own work (e.g., copied from another student, “borrowed” from another source without proper citation, based on ideas that were not your own) and the source of that work was not appropriately acknowledged. All students in this course are required to review and become familiar with university policies and regulations regarding plagiarism and academic misconduct in the University Calendar.

For additional detailed course information posted by the instructor, visit the course Desire2Learn page online at <https://d2l.ucalgary.ca/d2l/home>.

SUPPLEMENTAL INFORMATION

Principles of Conduct

The University Calendar includes a statement on the principles of conduct expected of all members of the university community (including students, faculty, administrators, any category of staff, practicum supervisors, and volunteers), whether on or off university property. This statement applies in all situations where members of the university community are acting in their university capacities. All members of the university community have a responsibility to familiarize themselves with the principles of conduct statement, which is available at: www.ucalgary.ca/pubs/calendar/current/k.html.

Plagiarism, Cheating, and Student Misconduct

The University of Calgary is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

Academic dishonesty is not an acceptable activity at the University of Calgary, and students are **strongly advised** to read the Student Misconduct section in the University Calendar at: www.ucalgary.ca/pubs/calendar/current/k-3.html. Often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are (1) presenting another student’s work as your own, (2) presenting an author’s work or ideas as your own without adequate citation, and (3) using work completed for another course. Such activities will not be tolerated in this course, and students suspected of academic misconduct will be dealt with according to the procedures outlined in the calendar at: www.ucalgary.ca/pubs/calendar/current/k-5.html.

Instructor Intellectual Property

Information on Instructor Intellectual Property can be found at <https://www.ucalgary.ca/policies/files/policies/Intellectual%20Property%20Policy.pdf>

Freedom of Information and Protection of Privacy

Freedom of Information and Protection of Privacy (FOIP) legislation in Alberta disallows the practice of having students retrieve assignments from a public place, such as outside an instructor's office, the department office, etc. Term assignments will be returned to students individually, during class or during the instructor's office hours; if students are unable to pick up their assignments from the instructor, they must provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

Human subjects

Students will not participate as subjects or researchers on human subjects in this course.

Internet and electronic communication device information

There are no restrictions on the use of laptops and tablets in class if they are used to take notes or find information relevant to the class, and if there is no disturbance or distraction of other students or the instructor. Phones must be turned off during class, unless you have previously identified yourself to the instructor as a health care or law enforcement professional.

Posting of Grades and Picking-up of Assignments

Graded assignments will be returned by the instructor or teaching assistant personally during scheduled lecture or laboratory periods, unless they are made available electronically through the course D2L webpage. Grades and assignments will not be available at the Department of Geography's main office.

Academic Accommodations

It is the student's responsibility to request academic accommodations, according to the university policies and procedures listed in the University Calendar.

The student accommodation policy can be found at: www.ucalgary.ca/access/accommodations/policy. Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf.

Students needing an accommodation based on a protected ground other than disability should communicate this need, preferably in writing to their instructor or the Department Head (email: david.goldblum@ucalgary.ca).

Documentation for Absences or Missed Course Assessments

Students who are absent from class assessments (tests, participation activities, or other assignments) should inform the instructor as soon as possible. Instructors may request that evidence in the form of documentation be provided. If the reason provided for the absence is acceptable, instructors may decide that any arrangements made can take forms other than make-up tests or assignments. For example, the weight of a missed grade may be added to another assignment or test. For information on possible forms of documentation, including statutory declarations, please see <https://www.ucalgary.ca/pubs/calendar/current/m-1.html>

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C->

[42/index.html](#)) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Act.

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness, and academic success and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support, or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, <https://www.ucalgary.ca/wellnesscentre/services/mental-health-services>) and the Campus Mental Health Strategy website (<http://www.ucalgary.ca/mentalhealth/>).

Contact Information for Student and Faculty Representation

- Student Union VP Academic 403-220-3911, suypaca@ucalgary.ca
- Students Union Representatives for the Faculty of Arts – 403-220-3913, arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca
- Student Ombuds Office information can be found at: www.ucalgary.ca/ombuds/

Campus Safewalk

Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day, to any location on Campus, including the LRT station, parking lots, bus zones, and university residences. Contact Campus Security at 220-5333 or use a help phone, and Safewalkers or a Campus Security officer will accompany you to your campus destination.