



GEOG 2000 Cartography – Fall 2023

Department of Earth and Environmental Sciences
 WHEN: MON, WED, FRI: 10:35AM—11:25AM
 WHERE: MCCAIN ARTS AND SOCIAL SCIENCE, ROOM 1102

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present. The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people.

Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

Course Instructor(s)

Name	Email	Office Hours
Professor: Jennifer M. Grek Martin	jgrekmartin@dal.ca	LSC Room, TBA

Name	ta@dal.ca	Dates, Time, Location
------	-----------	-----------------------

COURSE DESCRIPTION

This course introduces the art and science of mapmaking, from both theoretical and practical perspectives. On the theoretical side, students will explore cartographic theories from historical and contemporary lenses to critically think about map design and use. More practically, students will learn the basic skills of cartographic design, and become familiar with software applications used to make contemporary maps, culminating in the making and presenting of their own computer-generated map at the end of the term.

COURSE PREREQUISITES

ERTH/GEOG1030 or ERTH1080

COURSE EXCLUSIONS

None

COURSE DELIVERY

This course is a blend of lecture and hands-on application, therefore in-person attendance is highly recommended.

Mondays and Wednesdays: Lecture and discussion, McCain Arts and Soc Sci, Rm 1102

Fridays: Practical application, Either McCain 1102 or LSC Rm 2012 (see course outline or Brightspace)

If you miss a lecture: Lectures will not be recorded, but lecture slides will be provided via Brightspace!

If you miss a practicum: You can make up the practicum assignment: it will be due the following week!

I am committed to teaching—in class, by email, in marking assignments and exams—and you can expect me to be fair and to want you to learn. I encourage questions, discussion, and a safe and inclusive learning environment. If you are having trouble, let me know!

For your part, I hope the respect will be mutual and that the next twelve weeks will be an enjoyable learning experience!

LEARNING OBJECTIVES

- Understanding of key theoretical perspectives shaping the field of cartography,
- Understanding the ways in which maps shape, and are shaped by, social processes and how maps inform how we think spatially about phenomena,
- Learn practical cartographic techniques and how to apply them via computer software applications, including how to read and evaluate cartographic images,
- Develop critical thinking and communication skills for academic and work settings.

ASSESSMENT:

Assignment	Date	total%
in-class practica (8 @ 5% each)	Fridays	40%
Quiz 01 (in class, paper, 50 minutes)	16 October	15%
Quiz 02 (in class, paper, 50 minutes)	4 December	15%
Final Project – Presentation	27/29 November	5%
Final Project - Map	1 December	25%

There is no Final Exam for this course. (You're welcome.)

Conversion of numerical grades to final letter grades follows the

[Dalhousie Grade Scale](#)

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (0-49)
A- (80-84)	B- (70-72)	C- (55-59)	

COURSE POLICIES ON MISSED OR LATE ACADEMIC REQUIREMENTS

LATE ASSIGNMENTS: Late assignments (includes practica, Final Project) will incur a mark deduction penalty of 10% per day. All assignments, including the final project, will **not be accepted later than three days after the initial deadline, unless I have approved an alternate deadline.**

MISSED QUIZ: Make-up quizzes will not be provided for any reason. A missed Quiz will result in recalculation of your Final Grade out of the missed points (1 missed quiz = final grade/85 points, 2 missed quizzes = final

grade/70 points) OR a reweighting of the extant quiz (e.g., Quiz 01 = 30%), whichever results in a higher Final Grade.

COURSE POLICIES RELATED TO ACADEMIC INTEGRITY

Practica: collaboration during practica is encouraged but each submits their own work for assessment.

Final Project, Presentation, and Quizzes: Individual work only.

Note: Generative AI (i.e., ChatGPT) may be very useful as a study tool! However, work turned in for assessment should not use generative AI for content as I am assessing your skills as a budding cartographer.

COURSE MATERIALS

Some readings will be provided via pdf on Brightspace; the 'textbooks' can be accessed through the links below to OER Commons. I will refer to readings for this resource as MST + Chapter number.

Manson, S. M. (ed) (2017). *Mapping, Society, and Technology*. Minneapolis, Minnesota. University of Minnesota Libraries Publishing. URL: <https://oercommons.org/courses/mapping-society-and-technology>

COURSE CONTENT/OUTLINE

Readings and course topics subject to changes: check Brightspace

- | | |
|---------|---|
| 6 Sept | Lecture01: Introduction to Cartography
readings: Godlewska & Grek Martin (2011); MST Ch. 1.1 |
| 8 Sept | Lecture02: Science & Ethics — Maps as Scientific Documents
readings: Turnbull exhibit 2 (1989), Belyea (1996), MST Ch. 1.1, 2.1-2.3, 9 |
| 11 Sept | Lecture03: Guest Lecture: Jennifer Strang, Dalhousie GIS Centre, Intro to GIS |
| 13 Sept | Lecture04: Reading and Critiquing Maps
readings: Harley (2001a), MST Ch. 2.3, 7 |
| 15 Sept | Practicum01: Reading Maps (McCain 1102) |
| 18 Sept | Lecture05: History of Cartography — Wayfinding
readings: Wood, ch.2 (1992), Turnbull, exhibits 3, 4 (1989), MST Ch. 1.2
<i>*19 September = last day to add Fall courses, drop Fall courses with full refund</i> |
| 20 Sept | Lecture06: History of Cartography — Cosmography
readings: Woodward (1985), Turnbull, exhibit 5 (1989), MST Ch. 1.2 |
| 22 Sept | Practicum02: Sketch maps (McCain 1102) |

- 25 Sept Lecture07: Projections
readings; Dickinson (1969), "Map Projections", MST Ch 3
- 27 Sept Lectue08: Generalization & Scale; Intro to GIS
readings: MST Ch 3, 5
- 29 Sept **Practicum03: Projections (Intro to GIS) (LSC 2012)**
- 2 Oct *University Closed: Truth and Reconciliation Day Observed*
- 4 Oct Lecture09: Maps & Power Guest lecture — Jason Grek Martin (professor, SMU)
readings: Harley (2001b)
**4 October: Last day to drop Fall courses without 'W'*
- 6 Oct **Practicum04: Searching for Data; How to Cite a Map or Dataset (LSC 2012)**
- 9 Oct *University Closed: Thanksgiving Day Observed*
- 11 Oct Lecture10: Science & Ethics: Peters/Mercator & other controversies. Discuss Quiz01
readings: Monmonier ch. 1 (1995), MST Ch. 7
- 13 Oct **Practicum05: Final Project Ideas Workshop; Quiz01 Q&A (McCain 1102)**
- 16 Oct **Quiz01** (Material covered: 5 September – 13 October)
- 18 Oct Lecture11: Data & data sources
readings: Monmonier pp.123-129 (1991), MST Ch 2
- 20 Oct **Practicum06: Bringing Data into a GIS (LSC 2012)**
- 23 Oct Lecture12: Art & Ethics: Use of colour & pattern
readings: Brewer website, *Elements of Cartography* Ch 21 (1996), MST Ch 4
- 25 Oct Lecture13: Art & Ethics: Iconology & symbology; Map critique - what makes a "bad" map?
Readings: G.N.G. Clarke (1988), MST Ch 4
- 27 Oct **Practicum07: Working with Colour and Symbol (LSC 2012)**
- 30 Oct Lecture14: Elements of a map: Figure/ground & Placement
readings: MST Ch 4

- 1 Nov Lecture15: Typography & Lettering
readings: Monmonier (1993); Krygier “Push-Pin Maps” (2010)
**2 November: Last day to drop Fall courses with ‘W’*
- 3 Nov **Practicum08: Working with Layout and Type (LSC 2012)**
- 6 Nov Lecture16: Putting the map together: Isolinear and dot maps
readings: Koch (2004), McLeod (2000), MST Ch 5
- 8 Nov Lecture17: Putting the map together - choropleth & other thematic maps
readings: Monmonier pp. 129-146 (1991), MST Ch 5
- 10 Nov **Practicum09: Creating Different Types of Maps (LSC 2012)**
- 13-17 Nov *Fall Study Break! No classes...*
- 20 Nov Lecture18: Maps & the Web: Technology & Communication
guest lecture: James Boxall, Director GIS Centre and Map Collection (TBA)
readings: MST Ch 9, TBA
- 22 Nov Lecture19: Maps in Film & Literature (& Gaming)
readings: Hassan (2005), Wood (2004), Mills (2010)
- 24 Nov **Practicum10: Introducing Inkscape (Vector Graphics software) (LSC 2012)**
- 27 Nov Lecture20: Final project presentations: 3-minute Lightning Talks
- 29 Nov Lecture21: Final project presentations: 3-minute Lightning Talks
- 1 Dec Course Wrap-up and Quiz02 Review
- 4 Dec **Quiz02** (Material covered: 18 October – 1 December)

University Policies and Statements

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit or e-mail the Indigenous Student Centre at 1321 Edward St or

elders@dal.ca. Additional information regarding the Indigenous Student Centre can be found at: https://www.dal.ca/campus_life/communities/indigenous.html

Internationalization

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." Additional internationalization information can be found at: <https://www.dal.ca/about-dal/internationalization.html>

Academic Integrity

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. Additional academic integrity information can be found at: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion, please contact the Student Accessibility Centre (https://www.dal.ca/campus_life/academic-support/accessibility.html) for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro (<https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html>)

Conduct in the Classroom – Culture of Respect

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of

diversity and inclusiveness (Strategic Priority 5.2). Additional diversity and inclusion information can be found at: <http://www.dal.ca/cultureofrespect.html>

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner - perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution. The full Code of Student Conduct can be found at: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Fair Dealing Policy

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie. Additional information regarding the Fair Dealing Policy can be found at: https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html

Originality Checking Software

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. Additional information regarding Originality Checking Software can be found at: https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality-checking-software-policy-.html

Student Use of Course Materials

Course materials are designed for use as part of this course at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g. uploading to a commercial third-party website) may lead to a violation of Copyright law.