



**Cartography  
GEOG 3253  
FDE/FAO  
Fall 2024 Lakehead University  
Department of Geography and the Environment**

Course instructor: Megan Sheremata, Assistant Professor, Department of Geography and the Environment/Department of Geography

Lab instructors:

Orillia Campus: Megan Sheremata, Office OR 1037 (in Residence building)

[msherema@lakeheadu.ca](mailto:msherema@lakeheadu.ca)

Thunder Bay Campus: Reg Nelson

Office hours:

Megan Sheremata – Mon 2 – 3; Wed 11-11:45 and by appointment

Email: Keep in mind that emails are usually responded to within 2 business days. While we want to be communicative, the best place to ask questions is in class, lab or during office hours. Email should be primarily used for brief clarifications of details not in syllabus, or to schedule appointments for personal matters, special requests, etc...

Course format:

This is a hybrid course for Thunder Bay campus lectures only. All in-person labs in Thunder Bay can be held in-person only.

Lecture: in person only\* (Orillia) and online (Thunder Bay only) Mondays and Wednesdays from 5:30 to 6:30 PM Orillia Academic 1002

Lab: in person only\* (Orillia and Thunder Bay) Mondays from 2:30-5:30 PM in Orillia Academic 1002

Welcome to GEOG 3253! In this introduction to cartography we will discuss the principles, practices and techniques involved in making maps. The course will emphasize design principles and geographic literacy to help students work with maps as a form of communication. Students will create maps to build a range of technical skills while investigating environmental and sustainability problems, applying theory and technical knowledge to map design. Key topics in the course include: cartographic planning, visual communication, design, classifying spatial data, map critique, and

project management.

### **Learning Goals**

By the end of this course, you will be able to:

1. Create a series of maps by applying foundational concepts in cartography, as discussed in lectures and tutorials
2. Apply creative techniques in your map-making
3. Work independently to digitize, project, symbolize, and analyze spatial data “from scratch”, thereby communicating tabular data visually using principles of design to describe changing environmental conditions.
4. Critically evaluate the maps of peers using principles of cartographic design and knowledge of techniques in mapping

## Textbook

Required:

1. *Cartography. The Definitive Guide to Making Maps*. 2018. Kenneth Field. ESRI Press (required) Available at bookstore or online (e.g. Amazon)
2. Assigned readings posted on D2L from *GIS Cartography: A Guide to Effective Map Design*, Third Edition. 2017. Gretchen Peterson. Imprint CRC Press.
3. *Summer Dragons*. 2007 Holly Haggarty. Napoleon and Co.  
<https://www.amazon.ca/Summer-Dragons-Holly-Haggarty/dp/1894917529>

Recommended:

Mapping for a sustainable world / Menno-Jan Kraak, Robert E. Roth, Britta Ricker, Ayako Kagawa and Guillaume Le Sourd. Free download at  
<https://digitallibrary.un.org/record/3898826?ln=en&v=pdf>

Or

Any introductory GIS text to review key concepts

Weekly readings will be assigned on D2L on Mondays and should be read before the following Monday. Students are expected to take detailed notes, make lists of key terms for the midterm exam, and write questions about the readings to discuss in class. Asking questions about the readings will comprise part of your participation grade.

## Evaluation

- Lab Assignments (3, equal weight) 30%
  - In lab assignments student will apply ideas from readings and lectures  
The three lab assignments each consist of:
    - Technical tutorials in lab
    - Lab assignments to complete in lab and at home
    - Written reflections
    - Discussion in lab
    - Participation: providing peer support to other students in lab
  - The final lab assignment (#4) is a course capstone project focused on application and reflection (no tutorials).
- Final Independent Lab Assignment 40%
  - 4 components:
    - Draft map evaluation (10%)
    - Peer critique (10%)
    - Final group presentations (last day of class, 20%)
- Midterm exam (to be held during lab session, Tuesday November 5th ) 20%
  - Exam 1 will consist of approximately 60 minutes worth of multiple choice, matching, defining key terms, and short answer questions, though you will have 90 minutes to complete it.

Exam 2 will consist of approximately 75 minutes worth of multiple choice, matching, and short answer questions, though you will have 3 hours to complete it. Questions will be inclusive of the entire course.

- Attendance/Participation 10%

Attendance and lateness are a critical part of your grade. Attendance will be taken at either the start or end of lecture and labs starting on during the second week of classes. If you register late, please let your instructor(s) know. As per the LU student handbook: late arrivals, leaving early or not returning from break disrupts classes. If you miss more than 15 minutes in total of any class, you may be marked absent.

If you miss more than 5 lectures you may not receive a passing grade.

Make up labs/late assignments are not permitted unless the student meets in person with the lab instructor to discuss the reason and make arrangements to make up the lab within a timely manner (usually before the next lab).

### **Test dates and assignment due dates**

Midterm – Nov 5<sup>th</sup>

All labs must be submitted to the appropriate D2L Dropbox or in person (as specified).

Late assignments will only be accepted without penalty with prior approval. Otherwise, there may be a penalty of 10% of the assignment's value per day (including weekend days) (see below for missed/late work and absences)

Weekly schedule (subject to changes in consult with the class)

How to  
this

do well in  
course

Week	Date	Lecture/Lab Topic	
W1	Lec	Introduction to course; Mapping fundamentals	
	Lab	<b>No lab this week</b>	
W2	Lec	Elements of a map and cartographic processes	
	Lab	Introduction to lab/Map-making review - Making a hillshade map	
W3	Lec	Cartographic design and mapping landscapes	
	Lab	Lab 1 continued; map critique	
W4	Lec	Ethics and critical cartography	
	Lab	Lab 2 Part A: Sketch mapping	
W5	Lec	Mapping data	
	Lab	<b>No lab this week</b>	
W6	Lec	Participatory mapping techniques	Thematic Cartography
	Lab	Lab 2 Part B: Collaborative mapping	
W7		<b>Reading week</b>	
		<b>No lab this week</b>	
W8	Lec	Typology	
	Lab	Lab 3 Part A: Customizing fonts in GIS <i>Independent project assigned</i>	
W9	Lec	Symbology	
	Lab	Lab 3 Part B: Customizing symbology in GIS	
W10	Lec	Colour	
	Lab	Tutorial: More hand drawing techniques	
W11	Lec	Map evaluation & critique	
	Lab	<b>Good draft of maps due</b> In-lab critique of First draft of maps (Constructive, friendly peer feedback)	
W12	Lec	Fantasy mapping	
	Lab	Independent project work	
W13	Lec	<b>No lectures</b>	
	Lab	<b>Revised Maps Due Monday before lab – Map Gallery &amp; lab discussion of critique and revisions; peer and self-evaluations</b>	

- Take care of yourself, and communicate with your instructor about the challenges you are facing
- Attend lectures, take notes, and engage in the exercises
- Do the readings and complete the assignments by the due date
- Attend your lab section and complete the lab assignments
- Ask questions when you're feeling stuck!

- If you are concerned about any aspect of your academic program: make an appointment with a program counsellor in your degree program.
- If you are struggling with personal or health issues:
  - Counselling services offers individualized appointments to help students work through personal struggles that may be impacting their academic performance.
  - Student Health and Wellness Services is available to provide medical attention and counselling services:  
<https://www.lakeheadu.ca/students/wellness-recreation/student-health-and-wellness/health-services/orillia>
- If you have a documented disability or think you may have a disability:
  - Student Accessibility Services (SAS) can provide services and support for students with a documented learning or physical disability. They can also provide information about how to be tested for a learning disability. For more information see: <https://www.lakeheadu.ca/students/student-life/student-services/accessibility>

### **Other course guidelines**

Appreciate that we are all teachers and learners, each with a unique life experience and distinct prior knowledge. Do your best to discuss, listen and email with a spirit of respect for peers and those outside of class who pertain to the discussion.

Email – Please use your LU email and include the course code in the subject line so that we know which of our classes you are emailing about. For lengthy questions, accommodations, absences and sensitive matters, please arrange a meeting during office hours.

Group work/collaboration – The weekly assignments are individual work, not group work. You may discuss concepts and questions in class and lab, but you must each perform your labs independently.

Mark descriptions from Lakehead University.

A+	90 to 100%	Outstanding understanding of the course concepts including integration of materials and ideas, ability to apply knowledge to situations
A	80 to 89%	
B	70 to 79%	Above average to excellent knowledge, ability to apply knowledge to situations
C	60 to 69%	Satisfactory knowledge including ability to recognise and apply major course concepts, and to progress to next level of course
D	50 to 59%	Some grasp of course concepts; will likely encounter difficulty with higher levels
E	40 to 49%	Failed to meet minimum requirements of the course
F	1 to 39%	Failure
F	0	Failure resulting from academic dishonesty

*Students are advised to refer to the University Calendar to ensure that they have adequate grades and/or average to proceed in their program. Grades in this course are numerical (not letters)*

#### **Absences, missed and late work:**

You are entitled to up to two self-declarations of absences per term, within certain limitations.

A student may submit a maximum of two (2) separate Self-Declaration due to Illness and/or Extenuating Circumstances per course during a term.

- Students are responsible for contacting their instructor(s) prior to the deadline or scheduled time of the academic requirement, and submit at the same time the Self-Declaration Form. (Note: No medical note/documentation is required.)
- The instructor, in collaboration with the student, will determine the appropriate plan for the missed or late academic work. Where possible, the instructor will ensure any make-up work occurs in the same term and prior to the deadline for final grade submission.
- Students who exceed two (2) submissions per course during a term may no longer submit a Self-Declaration. Students are strongly encouraged to meet with their Program Director/Chair/Coordinator/Dean's Office and seek support from a health care professional or counsellor, if appropriate.
- Instructors may request documentation to demonstrate the student has met with their Director/Chair/Coordinator/Dean's Office and arrived at a course of action to manage the recurring absences before considering any further alternate academic requirement arrangements. Instructor(s) may provide additional flexibility to students and to support students in successful completion of academic term work requirements.

**Before declaring any absences please review the following resources:**

- [Student information webpage](#)
- [Self-Declaration form](#)

*The normal late penalty is 10% per day, including weekends. No late assignments will be accepted after the marks and/or assignments have been returned to the class.*

For this course, students must meet with me face-to-face following their absence to figure out a plan to make up for late work.

Students with accommodations for a disability (or other major constraint to their course participation) should meet with me at the **start of the semester** to discuss accommodations.



academic integrity as outlined in the Lakehead University's Academic Integrity and Policies.

The late penalty for assignments (without consideration as described above) is 10% per day late, including weekends. Late assignments should be submitted to the course professor in the same manner as the on-time assignments (i.e. DO NOT submit by email).

Students will not be given another opportunity to write the lab tests or midterm tests if it is missed a second time. In some cases, when extraordinary circumstances beyond a student's control prevent him/her from completing the rescheduled lab test or midterm test, a student may be eligible to petition Enrolment Services to explain the circumstances.

For students who are parents or primary caregivers, please communicate any scheduling challenges as soon as possible. You are always welcome to bring your children to class if you find yourself in a childcare emergency and they have no infectious illness. If they are sick, please send me a Self-Declaration email (as above, substituting your

### **Accessibility**

The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code. This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the University's courses and programs.

Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please visit: <http://studentaccessibility.lakeheadu.ca>. The office of Student Accessibility Services is located in OA1030.

### **Academic Integrity and University Policies**

The University takes a most serious view of offences against academic honesty such as plagiarism, cheating and impersonation. Penalties for dealing with such offences will be strictly enforced.

The "Code of Student Behaviour and Disciplinary Procedures" including sections on plagiarism and other forms of misconduct may be found on the Lakehead University Senate website. See the Code under Policies - Student Related in the University Policies at [www.lakeheadu.ca/faculty-and-staff/policies](http://www.lakeheadu.ca/faculty-and-staff/policies)

The following rules shall govern the treatment of candidates who have been found guilty of attempting to obtain academic credit dishonestly.

The minimum penalty for a candidate found guilty of plagiarism, or of cheating on any part of a course will be a zero for the work concerned.

A candidate found guilty of cheating on a formal examination or a test, or of serious or repeated plagiarism, or of unofficially obtaining a copy of an examination paper before the examination is scheduled to be written, will receive zero for the course and may be expelled from the University.

Students disciplined under the Code of Student Behaviour and Disciplinary Procedures may appeal their case through the Judicial Panel.

