



Department of Geography – Orillia Campus.

Geography 4211 ‘Advanced GIS’

An advanced course in the applications of geographic information systems, spatial analysis, and the display of spatial data. Practical exercises will provide hands-on experience using GIS software. Specific applications covered depend upon the expertise of the instructor, this year we will focus mostly on ESRI Arc software.

Credit weight: 0.5.

Prerequisite(s): Geography 2232 and 2271; or permission of the Chair of the Department of Geography and the Environment

Type C: Engineering, Mathematical and Natural Sciences

Wednesdays and Fridays 3:30pm – 4:30pm and Mondays 8:30-10:30 in OA1002 (computer lab)

Instructor: Lisa TUTTY BSc (hon) MSc **Contact information:**

Email: ltutty@lakeheadu.ca (*that is an “L” for Lisa*); please email using your lakeheadu email and put the course code in the subject line. You can generally expect a response within 48 hours. Skype is fleminggeomatrics_Ltutty

Office hours: are Wednesdays 2:30-3:30 and Thursdays 10-11am in OR1037 but you can drop by anytime I am usually here 9-5.

Course website: through D2L (you will find lecture notes there, as well as much important information).

Course goals:

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

- a) Work with ESRI software to solve common GIS problems
- b) Attain some certifications from ESRI for completing GIS modules
- c) *Recall and apply course content* (knowledge and skills) to real life examples – assessed on tests.

Marks breakdown:

ESRI GIS modules – 3% each to a maximum of **39%**, I expect these submitted at a rate of ~1 per week (i.e. *not* 13 of them in December).

Weekly GIS labs (in-class and in-lab; some will take > than one week to complete) – **40%**

Lab test – Testing the skills that you have learned in modules/lab - **21%**

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

Mark descriptions from Lakehead University. 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).

Textbook (recommended): Chang, K., 2016. Introduction to Geographic Information Systems, 8th Edition (New York, NY: McGraw-Hill).

Course policies on lateness and absence:

Late submissions may be accepted however the late penalty is 10% per day, including weekends.

Absences and lateness: You may receive consideration for your late work (meaning no late penalty) if you submit the **Certificate of Illness or Incapacitation** (for all health related concerns) or an appropriate piece of documentation for other excuses (ex. certification from the funeral home for the death of a close relative). The proper documentation must be received as soon as possible after the missed deadline. For absences from the midterm test or an in-class activity for reasons of illness use the **Certificate of Illness or Incapacitation**, for compassionate reasons or representing the university off-campus you will require written documentation in order to be receive *potential consideration* for a test rewrite or assignment extension. The late penalty for assignments (without consideration as described above) is 10% per day late, including weekends. Late poster outline and poster assignments should be submitted to Lisa via the D2L website. You may email copies of your documentation to Lisa but must submit proper paper copies when you return to class.

Missed Lab Test Due to Illness: In cases where a student misses a formal examination due to an incapacitating illness, the student must have the **Certificate of Illness or Incapacitation** completed by a Medical Professional and submit the completed form to Enrolment Services no later than three (3) working days after the date of the original final examination. The **Certificate of Illness or Incapacitation** must be dated as seen by the Medical Professional no later than one (1) working day after the examination, or three (3) working days if being seen by the Student Health & Counselling Centre (on campus).

In other exceptional circumstances, official supporting documentation must be provided (e.g. copy of a death certificate or letter from the funeral home) and submitted no later than three (3) working days after the date of the original final examination.

The **Certificate of Illness or Incapacitation** is the acceptable documentation for illness. It is available at:

https://www.lakeheadu.ca/sites/default/files/forms/Certificate%20of%20Illness_Incapacity.pdf

Official documentation (submitted by the dates above) must be sent to:

Nikki Maronese, registrar@lakeheadu.ca

Accommodation shall be granted only when the documentation indicates that the onset, duration and severity of the illness or other circumstances are such that the student could not have reasonably been expected to complete the examination on the scheduled date.

Upon receipt of the Request to Write Missed Exam - Certificate of Illness or Incapacitation or other supporting documentation, the Instructor will be notified to arrange for the student to write the missed examination. The final grade will be submitted to Enrolment Services as soon as possible after the rescheduled examination has been written.

Students will **not** be given another opportunity to write the examination 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 examination, a student may be eligible to petition Enrolment Services to explain the circumstances.

Student services:

Lakehead University has **counselling services, a nurse practitioner, and a naturopathic doctor** available, at the Wellness Centre-Orillia Campus the Centre makes appointments in person or by phone. Please contact the Centre at 705-330-4008 ext. 2115. The Wellness Centre is located in OA 1015.

<https://www.lakeheadu.ca/current-students/student-services/or/health-and-wellness>

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 has a **Student Accessibility Services (SAS)** office which provides support services and advocacy on behalf of students with disabilities. The SAS office is located in OA 1030 (Orillia Academic Building).

Phone: +1 (705) 330-4008 ext. 2103 Email: oraccess@lakeheadu.ca

Student Success Centre: They have advisors, tutoring and peer-assisted learning and are located on the first floor of Simcoe Hall in OA 1031. This includes help with writing and editing and math. If you have questions please call 1 (705) 330-4008 ext. 2118 <https://www.lakeheadu.ca/current-students/student-success-centre/academic-support-zone/orillia>

Lakehead University Library services: Use it to search for journal articles for your poster project for example <http://library.lakeheadu.ca/>

Technology Services Centre Helpdesk: TSC Helpdesk is the liaison between Lakehead University's IT services and users (Students, Faculty & Staff and by extension to guests and visitors). The principal purpose of the Helpdesk is to provide quick resolution to inquiries. <https://www.lakeheadu.ca/faculty-and-staff/departments/services/tsc>

Academic integrity – Code of student behaviour and disciplinary procedures.
<https://www.lakeheadu.ca/faculty-and-staff/policies/student-related/code-of-student-behaviour-and-disciplinary-procedures>

Academic Integrity:

Academic integrity is fundamental to learning and scholarship at Lakehead University. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves. 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 policies.lakeheadu.ca.

Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Copying material word-for-word from a source (including lecture and study group notes) and not placing the words within quotation marks.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Including references to sources that you did not use.
- Obtaining or providing unauthorized assistance on any assignment including:
 - Working in groups on assignments that are supposed to be individual work;
 - Having someone rewrite or add material to your work while "editing".
 - Lending your work to a classmate who submits it as his/her own without your permission.

On tests and exams:

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers
- Letting someone else look at your answers.

- Misrepresenting your identity.
- Submitting an altered test for re-grading.

Misrepresentation:

- Falsifying or altering any documentation required by the University, including doctor's notes.
- Falsifying institutional documents or grades.

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

(a) 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.

(b) 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.

Neat 15 minute exercise from Cardiff University (Avoiding plagiarism):
https://xerte.cardiff.ac.uk/play_4216