



Department of Geography – Orillia Campus.

Geography 4911 'Special topics in Geography'

"4Ga of history: the Geography & Geology of Canada"

Autumn 2019: September - December

This course will provide you with a systematic review of the evolution of environments on planet Earth over the last 4500 million years, and in particular, the geology and geographic history of the North American continent and the Canadian landmass. Planet Earth is at least 4500 million years old (4.5 billion = 4.5 Ga meaning giga annum) and a direct geological (rock) record exists for at least the last 3.8 billion years in the form of volcanic, metamorphic and sedimentary rocks. The changing dynamics of convection deep within the Earth's mantle and associated supercontinent assembly and breakup along with meteorite impacts, are now recognized as the major controls on development of the planet's atmosphere, oceans, biology, climate and geochemical cycles. This course reviews this long history and how it has built the geography of Canada as we know it. We will trace the beginnings of plate tectonics on early Earth and the evolution of the modern continents. The effects of climate change on the Canadian landmass, especially glaciations of the last few million years will be reviewed.

Credit weight: 0.5.

Tuesdays and Thursdays 11:30am – 1:00pm in OA2015

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.

Office hours: My office is OR (residence building) 1037.

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) *Conduct scientific research* to create a field trip report
- b) *Communicate scientific research* to your peers (field trip report)
- c) *Properly paraphrase and cite* (in APA format) *scientific literature* (field trip report)
- d) *Recall and apply course content* (knowledge and skills) to real life examples – assessed on tests.

Marks breakdown:

Midterm test October 29th in class – **25%** (multiple choice/'true and false'/'mix and match' + short answer)

Term project:

Field trip and field trip report Due November 28th -**40%** (*Mandatory field trip Oc5-6th*)

Examination – 35% (multiple choice/'true and false'/'mix and match' + short answer

+ long answer) Date/time will be scheduled by the University

All tests and the examination will be held in an examination room setting (NOT online).

Course schedule found on page 9.

| | | |
|----|------------|---|
| 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: Eyles, N and Miall, A (2018) Canada Rocks: The Geologic Journey 2nd Edition.

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** or a doctors note with the same information; 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 Examinations 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.

In other exceptional circumstances, official supporting documentation must be provided (e.g. copy of a death certificate or letter from the funeral home).

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

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

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-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>

Student Code of Conduct: Academic Integrity, Non-Academic, Appeal Policy. <https://www.lakeheadu.ca/about/policies-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 "Student Code of Conduct – Academic Integrity" including sections on plagiarism and other forms of misconduct may be found on the Lakehead University website noted in the section above.

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.

“ SANCTIONS

Upon finding a Student to have committed an offence under the Academic Integrity Code, the following Sanctions may be applied in any number and/or combination as deemed necessary. Repeated and/or multiple offences will increase the severity of the penalty. Graduate Students involved in an offence under the Academic Integrity Code may face more serious consequences than those applied to undergraduate Students.

- a. Official warning with a letter reporting the breach of Academic Integrity, sent to the Student, and copied to the Office of Student Affairs and Student's Dean;
- b. Submission of a revised or new piece of work;
- c. Reduction of the mark on the piece(s) of academic work;
- d. Mark of zero for the piece(s) of academic work;
- e. Reduction of the course grade;
- f. Ineligibility for a supplemental examination or any other evaluative exercise for the course;
- g. Mark of zero (F) for the course with a transcript notation of “Academic Dishonesty”;
- h. Completion of an educational program/workshop;
- i. Denial of permission to use facilities of the University, including computer facilities, laboratories, etc. for a designated period of time;
- j. Suspension for a period not to exceed six (6) academic terms (i.e. Fall, Winter, Spring & Summer); hence two (2) full academic years. Sanction of suspension requires the approval of the Provost;
 - Suspension entails the withdrawal from all University programs and privileges, including the right to enter and be on any University premises or be present at any University-sponsored events.
 - The Student's academic transcript will be updated with the notation of “Suspension.” It is the Student's responsibility to request

in writing to the Associate Registrar to have the annotation removed after two years after the end of the academic year in which the suspension was imposed.

k. Expulsion from a Program, Department/School, Faculty or the University.

- Expulsion from a Program, Department/School or Faculty requires the approval of the Provost;
- Expulsion from the University requires the approval of the President upon recommendation from the Provost.
- The Student's academic transcript will be updated with the notation of "Expelled" which is a permanent annotation.

l. Rescission of a degree, diploma, or certificate;

- Rescission of a credential requires the approval the President, acting under the authority of Senate, upon recommendation of the Provost.
- The President shall review the documentation and recommendation to rescind a degree, diploma or certificate. The President shall make a report to Senate in all such cases."

-Student Code of Conduct – Academic Integrity-

Neat 15 minute exercise from Cardiff University (Avoiding plagiarism):

https://xerte.cardiff.ac.uk/play_4216

| | Topic | Readings (Canada Rocks: The Geologic Journey, 2 nd Edition) |
|----------------------------|--|--|
| Week 1: 3Se 5Se | 1. Plate tectonics (getting the basics down) | Chapter 2 |
| Week 2: 10Se 12Se | 2. Geologic Time; and Earth's internal structure & Precambrian: Hadean (Earth's earliest history) | Chapter 1 |
| Week 3: 17Se 19Se | 3. Precambrian: Archean I & II - Arctica (Slave Province, Superior Province; Huronian glaciation) | Chapter 3 |
| Week 4: 24Se 26Se | 4. Proterozoic I – Nena & Columbia (Trans-Hudson, Thelon, Wopmay and Penokean orogenies; Sudbury structure, Midcontinent Rift) | Chapter 3 |
| Week 5: 10c 30c | 5. Proterozoic II – The rise and fall of Rodinia (Grenville orogeny) | Chapter 4 |
| Sat Oct 5 and Sun Oct 6 | <i>Special Topics Weekend Field Trip – very early Saturday morning until late Sunday evening</i> | |
| Week 6: 8Oc and 10Oc | 6. (Late) Proterozoic III - Laurentia (Peneplanation, Ediacaran fauna) – (formation of the Canadian Shield) | Ch 4 again |
| Week 7: | FALL BREAK | |
| Week 8: 22Oc 24Oc | 7. Paleozoic – Life! (Cambrian high seas, Cambrian Explosion) | Chapter 5 |
| Week 9: 29Oc 31Oc | Midterm Test on 29Oc – covers lectures up to the end of the Proterozoic (chapters 1-4) 8. Paleozoic – Eastern Canada (Pangea, Maritime Rift) | Chapter 6 |
| Week 10: 5No 7No | 9. Arctic I & II (Arctic platform, Sverdrup and Franklinian basins) | Chapter 7 |
| Week 11: 12No 14No | 10. Mesozoic - Western Canada | Chapter 8 |
| Week 12: 19No 21No | 11. Glaciation of Canada | Chapter 9 |
| Week 13: 26No 28 No | Catch-up/review & Field trip reports due | |

***Schedule subject to change.**