

## GEOG / ENST 2351 FDE - Course Outline Fall 2020

### **Course Instructor:**

Dr. Kamil Zaniewski  
Office: RC-2006F  
Tel.: 343-8472  
Email: [kamil.zaniewski@lakeheadu.ca](mailto:kamil.zaniewski@lakeheadu.ca)

### **Lab Instructor:**

Mr. Jason Freeburn  
Office: RC-2004  
Tel: 346-7890  
Email: [jason.freeburn@lakeheadu.ca](mailto:jason.freeburn@lakeheadu.ca)

**Lectures:** Mondays, Wednesday 2:30 – 3:30 by Zoom

**Labs:** (F2) Thursdays 2:30 – 4:30 by Zoom  
(F1) Fridays 8:30 – 10:30 by Zoom

### **Course Description:**

This course is an introduction to geomorphology, the study of landforms and the processes that produce and alter them. Emphasis is placed on the mechanics of geomorphic processes. The relationships between landscapes and the forces responsible for their shape (endogenic processes, gravity, wind, ice, water and waves) will be discussed in lectures. Students will be expected to understand the fundamental principles of geomorphology and be able to demonstrate clear understanding of the global landscape forming processes and landforms. Students will also be expected to attend field trips and participate in any discussion initiated during lectures or labs. Laboratory work will include analysis of landforms from maps and air photos.

### **Course Objectives:**

On completion of this course you will be thoroughly familiar with the basic concepts and laws of geomorphology. You will be able to identify landforms and explain the processes by which they were formed. The lab component for the course will provide you the experience to integrate a variety of datasets through digital spatial platforms, exposing you to real-world techniques for assessing geomorphic forms and processes.

## Textbook:

Trenhaile, A.S. *Geomorphology: A Canadian Perspective*. Any Edition. Don Mills, Ontario: Oxford University Press.

Note: older versions are quite cheap to purchase on Amazon:

<https://www.amazon.com/Geomorphology-Canadian-Perspective-Trenhaile/dp/0195430786>

## Course Grading:

|                          |               |
|--------------------------|---------------|
| Lab Assignments          | 30%           |
| Special Field Assignment | 10%           |
| 1 <sup>st</sup> Test*    | 15% (Oct. 21) |
| 2 <sup>nd</sup> Test*    | 15% (Nov. 11) |
| Final Exam*              | 30%           |

\*To pass the course, students are required to have at least 30 of the 60 marks allocated to the tests.

## Course Policies

The following course policies are consistent with those of the Geography Department and Lakehead University.

1. Regular attendance is expected in all zoom sessions.
2. Any absence due to illness, disability, or domestic affliction should be reported to the instructor. Additional digital materials will be available on the D2L site.
3. Students with special needs should talk to me at the beginning of the course and register with the Student Success Centre.
4. Assigned readings, when provided, are to be read prior to the next session. This will allow you to get the most out of the zoom sessions and ask informed questions.
5. Questions may be asked **anytime** during lectures. The best way is to ask a question through the Zoom chat. You can also digitally raise your hand in Zoom. Failing those, if you feel it's important enough, just interrupt me!
6. Make-up exams will be given only with an acceptable excuse as defined by the University calendar (medical, bereavement, etc.)
7. Lab assignments are to be submitted to the D2L site by the specified due date. Material submitted after the deadline may be accepted by emailing Jason Freeburn directly, but may be penalized 10% per day.

9. Lab assignments will be graded for **content, but also for legibility, structure, spelling and grammar.**

10. Lab and fieldwork safety instructions will be communicated, including any coursework that raise the risk of contracting COVID. More details will be provided in the first lab session about completing an “informed consent” to participate in a couple course-related activities.

### **LAB TOPICS SCHEDULE**

| <b>Date</b> | <b>Number</b> | <b>Title</b>   |
|-------------|---------------|--|
| Sept 17, 18 | 1             | Introduction, ArcGIS Online Accounts, Google Earth     |
| Sept 24, 25 | 2             | Hydrometric Data and the Magnitude – Frequency Concept |
| Oct 1, 2    | 3             | Cordilleran Glaciation                                 |
| Oct 8, 9    | 4             | Glacial Spillways                                      |
| Oct 15, 16  |               | FALL READING WEEK                                      |
| Oct 22, 23  | 5             | Review Virtual Field Trip; Stream Discharge            |
| Oct 29, 30  | 6             | Stream Networks  |
| Nov 5, 6    | 7             | Stream Sinuosity                                       |
| Nov 19, 20  | 8             | Mass Movements   |
| Nov 26, 27  | 9             | Coastal Processes                                      |

