# Geography 4451/ ENST 4451 Geography of Risk and Hazard

Winter Term, 2021

Instructor: Dr. Kamil Zaniewski

Office: RC-2006F

e-mail: kamil.zaniewski@lakeheadu.ca

**Lectures**: Tuesdays and Thursdays at 8:30 – 10:00 by Zoom

### **Course Description:**

An examination of the geographic theories, constructs, frameworks and methods used in the study of risk and hazard. Emphasis is placed upon human-environment interaction in environmental and technological hazards.

The course will attempt to explain the relationship between natural and anthropogenic events leading to what is colloquially referred to as a "disaster" or "catastrophe". It will also attempt to explain how such events can cascade into other events and build on each other to create maximum detrimental impact on human lives – often leading to extreme situations commonly referred to as humanitarian disaster. Impacts on infrastructure and economy will also be covered. Lectures will be organized around a focus on individual, major or minor, causes of disasters – starting with an explanation of the underlying causes – physical and human. Each lecture will also attempt to explain the way in which humans have dealt with the hazards in the past, the way in which different cultures adapted to the risk inherent in living in dangerous places and the various means of disaster mitigation in Canada and around the world.

### **Course topics:**

Meaning and perception of risk Earthquakes
Tsunami
Volcanic eruptions
Mass wasting events
Thunderstorms
Tornadoes
Hurricanes
Winter hazards
Flooding
Droughts
Wildfires

Radon

Acid rain

Solid waste storage Liquid waste disposal Nuclear power plants and radioactive waste Extraterrestrial threats Subsidence Epidemics

### **Student Presentations**

As part of the course, participants will be expected to present one case study related to a recent catastrophic event. The topic must fall within the themes presented in lectures (see list above) and will need to approved by the instructor. Depending on class enrollment, presentations will be done individually or in groups. Each presentation will be 15 minutes long with 5 minutes for discussion/questions. Presentations will be graded on content (mark shared equally between group members) and quality of delivery (each participant will be marked individually).

**Textbook:** None. Assigned readings only.

## **Course Grading:**

Progress Exam	20 %	(Feb. 11)
2 <sup>nd</sup> Progress Exam	25 %	(Mar. 18)
Final Exam	35 %	•
Student Presentations	20 %	(Mar. 16, Mar. 23, Mar. 25)

#### **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. Use of digital camera will be mandatory for the tests and the final exam.