



**Natural Hazards, Fall 2017**

**GEOG 2272 A01**

**Department of Environment and Geography**

**Clayton H. Riddell Faculty of Environment, Earth, and Resources**

---

**Instructor:** Lisa Ford

**Contact:** 217 Sinnott Building  
[Lisa.Ford@umanitoba.ca](mailto:Lisa.Ford@umanitoba.ca) (preferred means of communication)  
204-474-8255

**Office Hours:** M/W/F 10:30-11:20 and Tuesday 1:00-2:00 or by appointment

**Lecture Slot:** M/W/F, 12:30-1:20

**Course Dates:** September 7 – December 8

**Final Exam:** To be scheduled in the Final Exam Period, December 11-21, 2017

**Final Voluntary**

**Withdrawal Date: November 17, 2017**

**Required Course Materials:**

**Course Text :** Hyndman & Hyndman. 2017. *Natural Hazards and Disasters*, 5<sup>th</sup> edition. Nelson.

**Course Description (Catalogue)**

GEOG 2272 – Natural Hazards (PS)

Environmental hazards to human settlement and economy are examined with particular attention to meteorological, soil erosion, mass wasting, earthquake and volcanic phenomena. Not to be held with GEOG 2440. Prerequisite: a grade of C or better in one of GEOG 1290, GEOL 1340, or GEOL 1410, GEOG 1291 (053.129), GEOG 1200, GEOG 1201 (053.120), (007.134) GEOL 1360 (007.136) or permission of department head.

**Detailed Course description:** This course examines how the normal processes of the earth-atmosphere-hydrosphere-space systems result in events that are capable of dealing disastrous blows to humans on the scale of individual lives to civilizations. We will focus on the geologic processes of events such as earthquakes, landslides, volcanic eruptions, floods, hurricanes, tsunamis, tornadoes, and their local, national and global impact. In particular, we will examine the spatial and temporal occurrences of these hazards, methods and processes for hazard preparedness, response and recovery, and the social, economic and policy aspects that affect and, in many cases, compound the magnitude of the disasters associated with these natural phenomena. Case studies are drawn from contemporary and ancient societies.

### Course objectives:

- To provide you with a strong background in the academic discipline of the role of geography in the understanding and evaluation of natural hazards and disasters.
- To provide you with an understanding of hazards as a product of the interactions between society and environment with respect to their causes and effects and human responses to them.
- To have the students develop an understanding of the social and environmental components of hazards and their relationship to each other.
- To encourage you to listen, read and think critically and effectively.
- To provide you with a strong background in the academic discipline of human geography and prepare students for upper level study in geography.

### Course Evaluation:

1. Midterm Examination 1	20%
2. Midterm Examination 2	20%
3. Final Examination	35%
4. Disaster Summary*	25%

\*The disaster summary is due 'in class' on the date indicated on the assignment. Late assignments will be penalized at a rate of 10% per day – no exceptions, and will not be accepted after one week.

#### Test 1

Oct 13 – 50 minutes  
Worth 20% of course value  
Cumulative

#### Test 2

Nov 6 – 50 minutes  
Worth 20% of course value  
Cumulative

#### Final Examination

2 hours  
Worth 35% of the course value  
Cumulative

#### Final Grades:

Final grades are subject to departmental review. In accord with departmental policy, the grading scheme is as follows:

A+ 90 and above	B+ 75-79	C+ 65-69	D 50-59
A 80-89	B 70-74	C 60-64	F 0-49

**Note: Students are not permitted to submit “bonus” assignments in addition to the regular homework, term tests, and final exam to improve their grade.**

### **Test and Final Exam Format**

- Multiple choice, short answer, map questions and/or true and false questions will be based on lectures, assigned readings, videos, class discussions and activities, and the corresponding readings in the course textbook.
- Approximately 10-15% of the midterm and final exam questions will come from the course textbook, which may not have been covered in the lecture.
- The final exam is ***cumulative*** (approximately 50% of questions from course material covered in each of Midterms 1 and 2, and 50% of questions from material covered after the second midterm).
- Students who miss a test due to a documented medical or personal emergency will be offered a rewrite. *See Policy Regarding Missed Midterms.*

### **Test and Final Exam Regulations**

- In all tests and exams, ***NO*** dictionaries, digital dictionaries, notes, books, textbooks, cellphones, PDAs (such as Palm Pilots) or text messaging devices are allowed.
- Students are responsible for appropriately concealing their test and exam answers in order to prevent copying by other students. Allowing another student to copy off of your test/exam is considered cheating, and therefore academic misconduct.
- Attendance will be taken at midterm tests. You are required to have photo identification at each midterm test and the final exam.

### **Policy Regarding Missed Midterms**

- You must inform the instructor promptly (within 24 hours or as soon as physically possible) by email.
- If you miss a midterm exam for medical or compassionate reasons, you may be granted a make-up test. Documentation must be presented **within 48 hours** (not including weekends) of the missed test or exam in order to qualify for a make-up test. Please note that “reasonable reasons for missing a test or exam” do ***NOT*** include: vacations (even with relatives), long weekends away, or other course work.
  - You may have 2, or 3, or even 4 midterms scheduled on the same day. You may ***NOT*** write a deferred exam because you have other exams on the same day. Study early and plan accordingly.
  - If you do not contact the instructor within 48 hours to inform her that the exam has been missed, you will not be offered the opportunity to complete a re-write, regardless of documentation (i.e. waiting a week “because you forgot” means that you get a zero on the exam).
- Absence from tests must be justified by a medical or compassionate emergency – appropriate supporting professional documentation must be provided by the student for university records.
  - Your medical documentation ***MUST*** be legible and state that you were ***UNABLE*** to attend class and write the test or exam due to a medical circumstance. A note that you “saw a doctor” is ***NOT*** considered medical documentation.
- If in doubt about what is an appropriate reason for missing a midterm, please ask the instructor prior to the test.
- Once a test is started, regardless of the outcome, students will not be offered a make up test.

- Students will have 6 days from the midterm date to complete a make up test. The exam will be reviewed in class on the 7th day (one week after the original test date) and no make up tests will be available after that time.
  - If a student has medical or compassionate reasons to be unable to write within 6 days (for example, an extended illness), a make up test will not be provided, but accommodations will be discussed with the student (as long as documentation is provided).

### Test Review

- Test questions will **NOT** be returned or posted on Jump or *UM Learn*.
- Tests will be reviewed during lecture, approximately one week after the original in-class test date. While reviewing tests, students are permitted to make **handwritten notes only**. Laptops or any device capable of capturing images are not permitted.
- After the in-class review, students who would like to review their test may either come during office hours or make an email appointment within 1 week of the in-class review.
  - If you want to look over your test – come early (within 1 week of the in-class review)! Tests will not be available after this one week period.

### Grades

- Midterm marks will be posted on *UMLearn* as soon as they can reasonably be graded.
- Final grades will be posted on the Aurora Student at the University of Manitoba website once they have been approved by the Department of Environment and Geography.
- Students have 7 days after the in-class test review to discuss any grading concerns and **to ensure their grade has been recorded on UM Learn**.
  - It is the student's responsibility to check UM Learn for their midterm grades
  - Appeals for a re-read of an exam, or an adjustment of the grade, must be made within 7 days of the in-class review. The course instructor reserves the right to adjust the grade upwards, downwards, or not at all. If after the re-read you are not satisfied with the decision you should consult the Head, Department of Environment and Geography.
- After this 7 day period, **NO** changes will be made.

### Policy Regarding Missed Final Exam

- If you cannot take the final examination due to illness or compassionate distress (documented), you must fill in a request for a deferred examination with your **own (home) faculty** office. A courtesy email to the instructor is also appreciated.
  - You must contact your Faculty office **within 48 hours** of the exam
- Students will be notified by the Department of Environment and Geography via email when the deferred exam is scheduled.
  - Please do not email the course instructor asking for information about the deferred exam. All deferred exams are scheduled by the Department of Environment and Geography.
- Students must bring student ID or government photo identification to the deferred exam

## GEOG 2272 COURSE APPROACH AND POLICIES

### Course Delivery

- Course material will be delivered primarily through lectures, videos, in class discussion and corresponding textbook readings.

- Lecture notes will NOT be posted online; however, materials to ‘complement’ the course lectures will be posted on *UM Learn* including partial course notes (fill in the blank). It is your responsibility to access *UM Learn* and download these materials: <https://universityofmanitoba.desire2learn.com/>
  - The pace of the lecture is based on the partial course notes.
- Please note that I am under no obligation to post my PowerPoint notes; they are intended to assist you and not replace your personal notes.
  - These materials are subject to copyright (please see information regarding the use of copyright materials)
- For assistance with *UM Learn*:
  - Client Services Help and Solutions Centre (204.474.8600)
  - Email: [support@cc.umanitoba.ca](mailto:support@cc.umanitoba.ca)
  - 123 Fletcher Argue (Mon to Fri: 8:00 AM. - 8:00 PM)
- These online materials are not a substitute for coming to class, and you cannot use these notes exclusively as they will need to be supplemented by notes from lecture and the textbook. ***If you miss a class, you are responsible for obtaining the missing notes from a classmate. The instructor will not provide notes for any reason.***

### Assignments

You must create your own assignment and it must be original for this class.

A rubrics and feedback will be provided for the assignment.

Assignment may NOT be emailed to the instructor. Only hard copies will be graded.

The assignments should use the APA reference style, though (as the instructor will explain), endnotes are permitted for the disaster summary. The references should be formatted in APA. The University of Manitoba has good APA referencing information available at:

[http://umanitoba.ca/faculties/nursing/current/communications\\_apa.html](http://umanitoba.ca/faculties/nursing/current/communications_apa.html)

Please check the U of M link on APA formatting and if you aren’t sure of something, ASK the instructor. More information about referencing and paper formatting will be provided with the assignments.

Assignments must be submitted to the instructor on the due date, or to the Environment and Geography office (220 Sinnott Building) if the assignment is late.

- Do NOT put the assignment under the instructor’s door (it is considered not submitted unless arrangements have been specifically made with the instructor).
- Assignments are due ‘in class’ on the date indicated on the assignment. **Late assignments will be penalized at a rate of 10% per day.**
  - If you have a medical or compassionate reason for a late assignment, talk to the instructor as soon as possible.
  - Other class work, outside work (e.g. having a job), or a vacation does not count as a compassionate reason for a late assignment.
- **Assignments are not accepted after 7 days past the due date.**

Assignments will be graded as soon as is reasonably possible. However, students should expect that the assignment may take 2-3 weeks to be graded. Therefore, the student may, or may not, receive the paper back at the final exam, depending on the scheduling of the final exam.

## **Recording Class Lectures**

Lisa Ford and the University of Manitoba hold copyright over the course materials, presentations and lectures, which form part of this course. No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without permission Lisa Ford. Course materials (both paper and digital) are for the participant's private study and research.

- Students are **NOT** permitted to partially or entirely photograph, audio, or video record lectures.

## **Copyright**

**Please respect copyright.** Copyrighted works, including those created by the instructor, are made available to students for private study and research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the *Copyright Act* applies or written permission has been confirmed. For more information, see the University's Copyright Office website at [umanitoba.ca/copyright](http://umanitoba.ca/copyright) or contact [um\\_copyright@umanitoba.ca](mailto:um_copyright@umanitoba.ca).

## **Technology in the classroom**

The general University of Manitoba policy is that all technology resources are to be used in a responsible, efficient, ethical and legal manner.

- Computers are encouraged, though students should not participate in electronic messaging or posting activities (Facebook, texting, wikis, blogs, YouTube, etc) during class.
  - If you can not refrain from checking Facebook or playing games during the lecture, please sit at the back of the room so you don't distract other people. If your technology becomes disruptive, you will be asked to leave.
- Cell phones and portable music players must be turned off during lectures. Students are also required to remove earphones.
- If you are on call or you have an ongoing personal or family situation, you should switch your cell phone to vibrate mode and leave the classroom to take calls.
- **NO TEXTING DURING CLASS.**

## **Student Accessibility Services**

If you are a student requiring special accommodations, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations.

- It is YOUR responsibility to consult with Student Services and make the necessary arrangements for exams.
- Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

*Student Accessibility Services* <http://umanitoba.ca/student/saa/accessibility/>

520 University Centre

204 474 7423

[Student\\_accessibility@umanitoba.ca](mailto:Student_accessibility@umanitoba.ca)

## Communicating with your Instructor and other Students

Effective September 1, 2013, the U of M will only use your university email account for official communications, including messages from your instructors, department or faculty, academic advisors, and other administrative offices. [http://umanitoba.ca/registrar/email\\_policy/](http://umanitoba.ca/registrar/email_policy/)

- **If you typically use an account other than your U of M account, you can forward your U of M account to another personal account.** However, all emails must be SENT from the U of M account or they will not be returned.
- All communications must be professional and courteous.
- **E-mails** to the instructor must include:
  - The subject heading (**GEOG 2272**, a salutation (i.e. Dear, Hello, Good Morning . . . ), and your full name
  - Come from a University of Manitoba Account (. . . @myumanitoba.ca)
  - Emails that do not conform to the above will not be returned.
- Allow at least **48 hours** for response (weekdays only).
  - Email will typically not be returned on weekends.
- Emails requesting notes, information discussed in class or information found in the course syllabus will not be returned.
- It is the student's responsibility to check their email for a response to any email questions OR **course announcements** (i.e. class cancellations).

## Student Responsibilities

- Attend Class
  - Not all material covered in the lecture is found in the course textbook.
  - Please be punctual for lecture. If you arrive late or need to leave early, do so with a minimum of disruption.
  - Attendance will not be taken, and there is no penalty for missing a class (unless you miss an exam)
  - If you miss a class:
    - It is the student's responsibility to find out what was missed from a **classmate**.
    - While the partial PowerPoint slides are available on *UM Learn*, clarification notes are required in order to make sense of the material. The full notes will NOT be posted.
    - Instructor will not reply to emails requesting notes for missed classes (regardless of the reason).
- Study course material – at least two hours for every hour of lecture.
- Be Courteous
  - Talking during class (unless you are asking the instructor a question, or answering the instructor's question) is disrespectful to students who have come to lecture to learn. As an instructor, it is my job to maintain a suitable learning environment for all students. Talking in class interferes with the learning of the student you are talking to and the students around you.
- Remain available for all classes and the final exam period
  - The preliminary exam schedule is subject to change. Do not make travel arrangements etc. based on this schedule. It is the student's responsibility to remain available for the final exam period and students are not permitted to rewrite exams because they have made arrangements to begin work or travel.
- Forward your U of M email account to an email account that you consult regularly.
- Read the textbook. Not all the textbook will be covered in the lectures but may be covered in the test or exam.

## **Respectful Work and Learning Environment (RWLE)**

**RWLE Policy, Section 2.4:** The University of Manitoba does not condone behaviour that is likely to undermine the dignity, self-esteem or productivity of any of its members and prohibits any form of discrimination or harassment whether it occurs on University property or in conjunction with University-related activities. Therefore, the University of Manitoba is committed to an inclusive and respectful work and learning environment, free from:

- a. discrimination or harassment as prohibited in the Manitoba Human Rights Code;
- b. sexual harassment; and
- c. personal harassment

**RWLE Policy, Section 2.1.4.2:** The University does acknowledge the legitimate right and responsibility of academic staff members to correct inappropriate student behaviour, insist on order in the classroom and evict, as necessary, those who disrupt order in the classroom. [See Bylaw: Student Discipline.

- Respectful Work and Learning Environment Policy: <http://bit.ly/2b63HQO>
- Student Discipline Bylaw: <http://bit.ly/2b3RL3p>

## **Academic Integrity**

Students are responsible for ensuring they understand the University of Manitoba's policy on Academic Integrity (plagiarism, cheating, and examination impersonation). These policies are available in the University Calendar 2016-2017, General Academic Regulations. <http://bit.ly/2asrlZN>

1. "Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the academic integrity of the University, including but not limited to:
  - (a) Plagiarism – the presentation or use of information, ideas, images, sentences, findings, etc. as one's own without appropriate citation in a written assignment, test or final examination.
  - (b) Cheating on Quizzes, Tests, or Final Examinations – the circumventing of fair testing procedures or contravention of exam regulations. Such acts may be premeditated/planned or may be unintentional or opportunistic.
  - (c) Inappropriate collaboration – when a Student and any other person work together on assignments, projects, tests, labs or other work unless authorized by the course instructor.
  - (d) Duplicate Submission – cheating where a Student submits a paper/assignment/test in full or in part, for more than one course without the permission of the course instructor
  - (e) Personation – writing an assignment, lab, test, or examination for another student, or the unauthorized use of another person's signature or identification in order to impersonate someone else. Personation includes both the personator and the person initiating the personation.

The penalties for plagiarism and cheating are severe and range from receiving a grade of zero on an assignment, to academic suspension. **For more information on Cheating, Plagiarism, and Fraud:** <http://bit.ly/2b63fBP> & <http://bit.ly/2b63ywR>



**How to avoid cheating and plagiarism** (From the U of M's student resources online, [http://umanitoba.ca/student/resource/student\\_advocacy/cheating\\_plagiarism\\_fraud.html](http://umanitoba.ca/student/resource/student_advocacy/cheating_plagiarism_fraud.html))

### **In tests and exams**

1. Do not sit near friends.
2. Do not use study notes written on small pieces of paper.
3. Shield your answer sheet so that others cannot see it.
4. Do not take notes, books or other items into a test or exam except those expressly authorized. If unsure about what is permitted, always ask.
5. If calculators are permitted, remove the cover.
6. Do not gaze around the room when writing a test or exam.
7. Do not communicate with any other student during a test or exam: communicate only with the instructor or proctor.
8. Arrive on time. Hand in all papers as required.
9. If you hear of anyone obtaining information about a test or exam in advance, report it to the instructor without delay.
10. If procedures for administering or supervising tests or exams seem inadequate to you, let the instructor or other authority know what your concerns are.
11. Report to the invigilator or instructor any unusual or suspicious behaviour of other students writing the test or exam.

### **In essays, reports and other assignments**

1. Know the rules, including the specific rules for the specific assignment.
2. Do not work with a fellow student on any assignment unless authorized to do so. It is called 'inappropriate collaboration' if you exceed the amount of group work expected by the professor. Make sure you clearly understand the professor's expectations for individual and group work on each assignment/project.
3. Acknowledge all assistance received, including help from friends or others in terms of proofreading, suggestions or information.
4. Do not submit work that is not entirely yours, i.e., use of another student's essay, use of a downloaded essay from the Internet, use of an assignment purchased from a service/agency.
5. Do not cite in your bibliography any books, articles or other sources, including the Internet, which you have not used for the assignment in question.
6. Do not lend your work to other students unless you feel certain they will not use it dishonestly.
7. Do not hand in the same work more than once; whether for different classes or if you are repeating a course.
8. Keep a photocopy of all assignments, essays, and reports you hand in to be graded. Keep rough copies and notes until your final grade is received. Notes and rough copies can constitute valuable evidence that your work is your own.
9. When saving electronic files, save the drafts of assignments/ papers under different versions. This maintains a record of your work as it develops to the final version.
10. The assignment you prepare for one course must not be resubmitted in whole or in part at any time. This is called 'duplicate submission'.
11. When in doubt about any practice, ask your instructor. Do not rely on friends, relatives or fellow students for information about what is acceptable academic practice in a particular course or discipline.
12. When material you read impresses you, be particularly careful to use your own words. Use quotation marks and cite sources whenever you use the words of another, even phrases only one or two words in length. Acknowledge all sources of information and inspiration.

## **READINGS AND IMPORTANT DATES**

### **Introduction to Hazards and Disasters**

*Reading:* Chapter 1

### **Plate Tectonics**

*Reading:* Chapter 2

### **Earthquakes, The Disasters**

*Reading:* Chapter 3

### **Earthquakes, Assessing Hazard & Video**

*Reading:* Chapter 4

### **Tsunami**

*Reading:* Chapter 5

### **Volcanoes**

*Reading:* Chapter 6

### **Volcano Eruptions**

*Reading:* Chapter 7

### **Slope Failures**

*Reading:* Chapter 8

### **Land Subsidence and Karst**

*Reading:* Chapter 9

### **Rivers and Flooding**

*Reading:* Chapter 10

### **Medical Hazards**

*Reading:* Chapter 17

### **Tropical Cyclones**

*Reading:* Chapter 11

**Oct 6 – Fall Break, no classes**

**Oct 9 – Thanksgiving, no classes**

**Oct 13 – Midterm #1**

**Nov 6 - Midterm #2**

**Nov 13 – Remembrance Day, no classes**

**Dec 8 (at the beginning of class) – Disaster Summary due**