# SYLLABUS Earth Sciences 2240F Catastrophic Events in Earth History

# 1. <u>Instructor Information</u>

Instructor: Dr. Sean Shieh B&GS room 1066

Contact: sshieh@uwo.ca

Personal questions should be emailed to the instructor.

# 2. Course Description

Earth Sciences 2240F considers those events so dramatic and catastrophic that they leave evidence in the geologic record and can threaten life on Earth. Included will be violent volcanic eruptions, mega-earthquakes and the tsunami arising from them, rapid climatic changes and associated storms, and impacts from asteroids and comets. As much 4(nd)-10ldoh 4(.4(c)4(c)4(prerequisites.

Contingency plan for an in-person class pivoting to 100% online learning

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor.

4.

#### Weeks 5-6

- · Chapter 7: Volcano Basics
- · Chapter 8: Killer Volcanoes
- · Chapter 9: Flood Basalts

Graded quiz for Volcanoes

## Mid-term Exam (2 hours); Covers content to end of Chapter 9

# **Unit 3: Processes Driven by External Energy**

#### Week 7

- Unit 3 Introduction
- Chapter 10: Physics and Chemistry of Air and Water

#### Week 8

**Chapter 11**: Cyclonic Storms

Graded quiz for Air, water and Storms

· Chapter 12: Climate Basics

## Week 9

Chapter 13: Climate: Past, Present, Future

Graded quiz for Climate

## Week 10

- Chapter 14: Space Impacts Basics
- · Chapter 15: Space Impacts Case Studies

Graded quiz for Space Impacts

## Part B: Global Catastrophes that Caused Extinctions

## **Unit 4: Mass Extinctions**

☐ 30% End-of-Term 2 hour written examination

Date, time and location to be determined by the Registrar's office

• This covers the second half of the course: Units 3 &

If a student fails to write a scheduled **Special Examination**, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under Special Examinations).

## 7b. Accommodation and Accessibility

#### **Accommodation Policies**

Students with disabilities work with Accessible Education (formerly SSD), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/Academic Accommodation\_disabilities.pdf,

## 7c. Academic Policies

TET-901B1T8.21A40 Stab D(C)Tj-CEJM (OrtoE5TTd [(S)->>BDC pf 0 4 Tc 0.0c 0.010C >>B172s 0.016 0.196 d)

**Multiple Choice:** Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating

**Remote proctoring**: Tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: <a href="https://remoteproctoring.uwo.ca">https://remoteproctoring.uwo.ca</a>.

## 7d. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: https://www.uwo.ca/sci/counselling/.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at (519) 661-2147 if you have any questions regarding accommodations.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <a href="https://www.uwo.ca/se/digital/">https://www.uwo.ca/se/digital/</a>.

Learning-skills counsellors at the Student Development Centre (http://www.sdc.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mentalhealth) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC, http://westernusc.ca/services.