

Earth Sciences 1022A (Earth Rocks!) Course Outline

1. Course Information

Course Information:

Earth Sciences 1022A

Academic Term: Fall 2025-26

Lecture Hours: In-person; Two 1 hr. lectures/week

Laboratory Hours: In-person; One 2 hr. lab session/week (see Section 3 for schedule)

List of Prerequisites and Antirequisites

Prerequisites: None Antirequisites: ES1070A/B, ES1081A/B

Unless you have either the requisites for this course or written special permission from your Dean's Designate (Department/Program Counsellors and Science Academic Advisors) to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

Instructors	Email	Office	Phone	Office Hours
Dr. Cam Tsujita (Course Coordinator and Instructor)	ctsujita@uwo.ca	B&GS 1064	(519) 661-3198 (ES main office)	Mon., Wed. 1:30-3:30 pm or by appt.
Teaching Assistants (TAs)	Email			Office Hours
TBA				Contact your TA(s) directly via email.

Note on emailing instructors/TAs: Students must use their Western (@uwo.ca) email addresses and put the *course number* **Earth Sciences 1022A** in the subject line when contacting their instructors. If you have a question for which you would require a direct response from me (Cam, your instructor), feel free to email me at ctsujita@uwo.ca

Office Hours: If you would rather meet with your instructor (Cam Tsujita) in person, please come to regular office hours: **1:30-3:30 pm on Mondays and Wednesdays in Cam's office: B&GS1064.**

3. Course Syllabus, Schedule, Delivery Mode

Objectives of this course: This course is designed to introduce students to the “stuff” the Earth is made of (minerals, rocks and associated materials), the significance of these materials to the understanding of the internal and external processes that shape the face of our highly dynamic planet, the many ways Earth’s processes and materials affect the lives of humans (in the context of natural resources and natural disasters such as volcanoes, earthquakes and floods), and major changes that have occurred in the Earth system over its ~4.6 billion year history.

Course-level learning outcomes:

Upon successful completion of this course, the student will be able to:

1. Identify and classify common minerals, rocks and other Earth materials based on their physical characteristics.
2. Describe how these materials (in item #1) are used in the interpretation of Earth’s external and internal processes and geologic age.
3. Integrate observational and theoretical information to explain why and how natural disasters (e.g. earthquakes, volcanic eruptions, tsunamis, landslides) occur, how natural resources are formed, and how the Earth system has evolved through time.

Background Required: This course is intended for (but not limited to) students registered in faculties other than Science.

Delivery Format:

Lectures: In-Person

Lecture slides will be posted on OWL each week according to the course schedule below (Course Schedule for ES1022A).

Labs: You have been assigned a specific lab section (numbered 002-007) in your timetable. For each section, there will be a Lead TA who will be introducing the labs and will be marking the lab assignments. If you have any questions for TAs about the labs (or lab tests), or need to arrange a make-up for a lab or lab test (with a valid reason for missing it) please contact the Lead TA. There will also be an assistant TA who will assist the Lead TA in helping students with the lab activities.

Laboratory assignments will be provided as downloadable pdf files on OWL. You will be required to print out the worksheets (which will be handed in for marking). It is recommended that students read lab assignments before the lab sessions to ensure they are prepared for the in-lab exercises.

Note: if you need to change the lab section you are officially registered in (according to the Office of the Registrar), you **must** ask your instructor for approval and make the change through the Office of the Registrar. This is because your TAs need to be able to keep track of exactly who is in each lab section. If approved, you must then confirm both your instructor and TAs of both sections of your intent to attend a different section.

Weekly Quizzes: Asynchronous Online (via Mastering Geology). Each week's quiz will open on Thursday at 12:00 am and will be due the following Thursday at 11:55 pm; see course schedule below).

Note on Learning Course Content: As with any university course, you are responsible for understanding **all** material presented in the lectures, so it is very important to dedicate a significant amount of time to attend all lectures (~ 1 hour for each lecture) and to read associated the supplementary material (e.g. e-text readings). Note that **some of the lectures cover topics that are treated only superficially in the text**. The exams will draw from material covered in the lectures, but the e-text readings, as well as exercises provided in Mastering Geology will provide additional background that will aid in the understanding of the concepts.

Course Schedule for ES1022A (2025)

Week	Day	Date of Lecture	Lecture Topics (<i>and Suggested Chapter Readings in "Earth" E-text</i>) Note lectures will be released and linked on OWL (in "Course Content" on the dates indicated). E-text readings should be done prior to attending the associated lectures.	Mastering Geology Quizzes (due by 11:55 pm on date indicated; always Thursday.	Lab Topics & Test / Exam Dates)	OWL Forums (due 11:55 pm on Thurs.)
Wk. 1 (Sept. 4)	Th	Sept. 4	Course Introduction	No quiz due	No Labs	No Forums
Wk. 2 (Sept. 7-13)	Tu	Sept. 9	Lecture 1: The Earth System <i>Chapter 1: An Introduction to Geology and Plate Tectonics</i>	Quiz 1 on Wk. 2 material (Intro, Minerals) opens Th., Sept. 11, due Th., Sept 18	No Labs	Wk. 2 Forum opens (Th.)
	Th	Sept. 11	Lecture 2: Minerals <i>Chapter 2: Minerals: The Building Blocks of Rocks</i>			No Forum due
Wk. 3 (Sept. 14-20)	Tu	Sept. 16	Lecture 3: Igneous Rocks <i>Chapter 3: Igneous Rocks</i>	Quiz 1 on Wk. 2 material (Intro, Minerals) due Th., Sept. 18. Quiz 2 on Wk. 3 material (Ign. Rocks, Volcanoes) opens Th., Sept. 18.	Attend Lab 1 (Minerals) Due at end of lab session (same day).	Wk. 2 Forum due (Th.)
	Th	Sept. 18	Lecture 4: Volcanoes <i>Chapter 4: Volcanoes and Volcanic Processes</i>			Wk. 3 Forum opens (Th.)
Wk. 4 (Sept. 21-27)	Tu	Sept. 23	Lecture 5: Weathering and Sedimentary Rocks <i>Chapter 5: Weathering and Soil</i> <i>Chapter 6: Sedimentary Rocks</i>	Quiz 2 on Wk. 3 material (Ig. Rocks, Volcanoes) due Th., Sept. 25 Quiz 3 on Wk. 4 material (Weathering, Sed. & Met. Rocks) opens Th., Sept. 25	Attend Lab 2 (Igneous Rocks) Due at end of lab session (same day).	Wk. 3 Forum due (Th.)
	Th	Sept. 25	Lecture 6: Metamorphic Rocks <i>Chapter 7: Metamorphism and Metamorphic Rocks</i>			Wk. 4 Forum opens (Th.)
Wk. 5	Tu	Sept. 30	National Day for Truth and Reconciliation (no class)	Quiz 3 on Wk. 4 material	No labs this week	Wk. 4 Forum due (Th.)

(Sept. 28-Oct. 4)	Th	Oct. 2	Lecture 7: Geologic Time <i>Chapter 8: Geologic Time</i>	(Weathering, Sed. Rocks, Met. Rocks) due Th., Oct. 2. Quiz 4 on Wk. 5 material (Geo.Time, Deformation) opens Th., Oct. 2.		Wk 5 Forum opens (Th.)
Wk. 6 (Oct. 5-11)	Tu	Oct. 7	Lecture 8: Deformation <i>Chapter 9: Crustal Deformation</i>	Quiz 4 on Wk. 5 material (Geo.Time, Deformation) due Th., Oct. 9. Quiz 5 on Wk 6 material (Earthquakes and Earth's Interior) opens Th., Oct. 9.	Attend Lab 3 (Sed. And Met. Rocks) Due at end of lab session (same day).	Wk 5 Forum due (Th.)
	Th	Oct. 9	Lecture 9: Earthquakes and Earth's Interior <i>Chapter 10: Earthquakes and Earth's Interior</i>			Wk 6 Forum opens (Th.)
Wk. 7 (Oct. 12-18)	Tu	Oct. 14	Lecture 10: The Ocean Floor Chapter 11: The Ocean Floor	Quiz 5 on Wk. 6 material (Earthquakes and Earth's Interior) due Th., Oct. 16. Quiz 6 on Wk. 7 material (Ocean Floor and Plate Tect.) opens Th., Oct. 16.	Lab Review (Labs 1-3)	Wk 6 Forum due (Th.)
	Th	Oct. 16	Midterm Lecture Exam (regular class time, location TBA; see OWL Announcements for Details)			Wk 7 Forum opens (Th.)
Wk. 8 (Oct. 19-25)	Tu	Oct. 21	Lecture 10: The Ocean Floor Chapter 11: The Ocean Floor	Quiz 6 on Wk. 8 material (Ocean Floor and Plate Tectonics) due Th., Oct. 23. Quiz 7 on Wk. 8 material (Mtn. Building, Mass Wasting) opens Th., Oct. 23.	Lab Test 1 (minerals and rocks; labs 1-3 inclusive)).	Wk 7 Forum due (Th.)
	Th	Oct. 23	Lecture 11: Plate Tectonics <i>Chapter 12: Plate Tectonics: The Framework for Modern Geology</i>			Wk 8 Forum opens (Th.)
Wk. 9 (Oct. 26-Nov. 1)	Tu	Oct. 28	Lecture 12: Mountain building <i>Chapter 13: Mountain Building and Continental Frameworks</i>	Quiz 7 on Wk. 9 material (Mtn. Building, Mass Wasting) due Th., Oct. 30 Quiz 8 on Wk. 10 material (Streams, Groundwater) opens Th., Oct. 30.	Attend Lab 4 (Strat. Principles) Due at end of lab session (same day).	Wk 8 Forum opens (Th.)
	Th	Oct. 30	Lecture 13: Mass Wasting <i>Chapter 14: Mass Wasting: The Work of Gravity</i>			Wk 9 Forum opens (Th.)
Wk. 10 (Nov. 2-8)	Tu	Nov. 4	Fall Reading Week (no classes)	No quizzes this week.	No labs this week.	No forums this week.
	Th	Nov. 6				

Wk. 11 (Nov. 9-15)	Tu	Nov. 11	Lecture 14: Streams Chapter 15: Running Water	Quiz 8 on Wk. 9 material (Streams, Groundwater) due Th., Nov. 13. Quiz 9 on Wk. 11 (Glaciation, Deserts) opens Th., Nov. 13.	Submit Lab 4 Attend Lab 5 (Structural Geology)	Wk 9 Forum due (Th.)
	Th	Nov. 13	Lecture 15: Groundwater Chapter 16: Groundwater			Wk 11 Forum opens (Th.)
Wk. 12 (Nov. 16-22)	Tu	Nov. 18	Lecture 16: Glaciation <i>Chapter 17: Glaciers and Glaciation</i>	Quiz 9 on Wk. 10 material (Glaciation, Deserts) due Th., Nov. 20 Quiz 10 on Wk. 12 material (Shorelines, Mineral Resources I) opens Th., Nov. 20	Submit Lab 5 Attend Lab 6 (Geologic Maps)	Wk 11 Forum due (Th.)
	Th	Nov. 20	Lecture 17: Wind <i>Chapter 18: Deserts and Winds</i>			Wk 12 Forum opens (Th.)
Wk. 13 (Nov. 23-29)	Tu	Nov. 25	Lecture 18: Coastlines <i>Chapter 19: Shorelines</i>	Quiz 10 on Wk 1 material (Shorelines, Mineral Resources I) due Th., Nov. 27 Quiz 11 (Mineral Resources II, Energy Resources) opens Th., Nov. 27	Submit Lab 6 Lab Review (ahead of Lab Test 2, focusing on Labs 4-6)	Wk 12 Forum due (Th.)
	Th	Nov. 27	Lecture 19: Mineral Resources I <i>Chapter 20: Mineral and Energy Resources</i>			Wk 13 Forum opens (Th.)
Wk. 14 (Nov. 30 - Dec. 6)	Tu	Dec. 2	Lecture 20: Mineral Resources II <i>Chapter 20: Mineral and Energy Resources</i>	Quiz 11 (Mineral Resources II, Energy Resources) due Th., Dec. 4)	Lab Test 2, focusing on Labs 4-6 (see OWL for details)	Wk 13 Forum due (Th.)
	Th	Dec. 4	Lecture 21: Energy Resources <i>Chapter 20: Mineral and Energy Resources</i> Catch up on any remaining lecture material. Q & A Review if any remaining time			
Wk. 15	Tu	Dec. 9	Q & A Review if any remaining time			

Key Sessional Dates

Classes begin: Thursday, September 4

Last day to add a full course or first-term half course (Friday, September 12)

Thanksgiving: Monday, October 13

Reading Week: November 03 to November 09

Last day to withdraw from a first-term half course without academic penalty: Monday, December 1 (Course withdrawals after this date will appear on a transcript with a grade of 'F').

Classes end: Tuesday, December 9

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, affected 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. Course Materials

Required Materials (Student to Purchase):

Textbook (e-text): *Earth: An Introduction to Physical Geology, Updated 4th Canadian Edition* (Tarbuck, Lutgens, Tsujita and Hicock, 2019) **with Mastering Geology**. Purchase online via the Western Book Store or directly from Pearson (pearson.com/mastering). Important Note: When registering for **Mastering Geology**, you **must use your Western email address as your Pearson Account username**. **Course ID:** When prompted for **course id in Mastering Geology**, use: **tsujita36680**. Further instructions on ordering and registering this Pearson product (Mastering Geology with e-text) are provided on OWL.

Lectures, lab assignments and other course materials: Other than the e-text and Mastering Geology, all essential course materials are made available on OWL (<https://westernu.brightspace.com/>)

Important Announcements, News and Updates: Students are responsible for checking the course OWL site (<https://westernu.brightspace.com/>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class. Students are responsible for checking OWL on a regular basis.

All course material will be posted to OWL: <http://owl.uwo.ca>.

If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Technical Requirements:

If a health crisis lock-down necessitates migration of the course to an online format, it will be important to have a stable internet connection and a computer with working microphone and/or webcam to view lectures, labs and to online write exams.

5. Methods of Evaluation

As you will see below, we have allocated parts of your course grade to **multiple types of assessments distributed over the term. This is deliberate (and for your benefit)** This design allows students to work for marks in a larger number of smaller installments over time rather than fewer, larger assessments. This means that students have a reasonable opportunity to compensate for a poor grade in one or more of these assessments (e.g. midterm lecture exam or lab test). We regard this as preferable over fewer, higher-stakes, assessments.

Lecture Portion (70% final grade combined):

Weekly Online Quizzes (in Mastering Geology; see below*): 10%

Weekly Online (OWL Forum) Participation (Participation in OWL Lab Forum discussions): 5%

Midterm Lecture Exam (up to and including “Deformation” lecture): 20%

Final Lecture Exam (cumulative, but focused on material after “Deformation” lecture): 35%

Lab Portion (30% final grade combined):

Weekly Lab Assignments: 10%
Lab Test 1 (on labs 1-3): 10%
Lab Test 2 (focused on labs 4-6): 10%

Major Test and Exam Dates*:

Lab Test 1: Week of Oct. Oct. 19-25, 2025, during your regularly scheduled lab session
Lab Test 2: Week of Nov. 30 -Dec. 6, 2025, during your regularly scheduled lab session
Midterm Lecture Exam (Regular Class Time; Location TBA)
Final Lecture Exam (In Person): TBA by Office of the Registrar

Online (Mastering Geology) quizzes

For the purpose of encouraging everyone to stay “on track” in learning the subject matter as it is covered, **online quizzes will be completed (via Mastering Geology)** by students on a weekly basis. There will be a total of 11 quizzes over the course of the term. For each of the weeks indicated above, you will complete the quiz by **11:55 pm on the date indicated above (which will always be a Thursday)**. Each quiz will be based on the lecture content covered the current and/or previous week. You will have approximately one week (and three (3)) attempts within this time to do each question of each quiz (so you can re-answer any questions you have answered incorrectly). Provided that you have done the e-text readings and have attended the lectures, it should be pretty easy to get good marks in these quizzes. Quizzes submitted after the deadlines indicated will be immediately deducted 10%, then an additional 10% for each subsequent day (24 hours) late. Your quiz mark for the term (10%) will be the average mark of your best 10 (of 11) quizzes.

Participation in OWL Forums

A small portion of the **Lab Portion** grade (and 5% of the final grade based on the student’s best 10 out of 11 postings) will be based on student participation in OWL Forum discussions. The OWL forums will be monitored by the Instructor and Teaching Assistants to track discussions.

For each designated week (see Course Schedule above), you will be expected to:

1. Answer at least one question posted by your classmates, TA or instructor)
2. Post your own question.

The questions will pertain to the lecture and/or lab content of that week. You will be provided an initial prompting question at the very beginning of each week’s forum to start the discussion.

You will have one week to participate in each week’s forum. To help you remember the “due date” for the forums, they will open and close on the same time and day as the quizzes (always on a Thursday).

Laboratories

Laboratory Assignments: Laboratory assignments will be provided as downloadable pdf files on OWL. You will be required you to print out the worksheets (which will be handed in for marking). Note: Labs for this course will start on the 3th week of classes (i.e., week beginning Sept. 15), so there will be no need for you to attend labs up until that week. The first three lab assignments will be directly handed in to presiding TA at the end of the lab session. The last three lab assignments, you will hand them in at beginning of your next regularly scheduled lab session prior to the pre-lab presentation (i.e., you will have one week to complete each lab assignment for labs 4,5 and 6). Lab assignments handed in late will be deducted 10% of the assignment grade for each day late.

If you miss, or anticipate missing, a lab due to medical (or other legitimate reasons), report your absence to the head (instructional) TA of the relevant lab to arrange an alternate date to complete and submit the assignment(s). If you miss a lab test/exam, report to Academic Counselling with documentation for recommendation of Academic Accommodation (if approved, arrangements for an alternate date to write a make-up test/exam. Also advise your instructor of your absence.

Format for Midterm and Final Lecture Exams: Both exams will consist of a combination of multiple choice, fill in the blank & written answer questions. The Midterm (Lecture) Exam will be 50 minutes long and the Final (Lecture) Exam will be 2 hours long.

General Information About Missed Course Work

Academic Consideration

If you will be temporarily absent due to extenuating circumstances and miss a course-related component or assessment, you must report your absence by using the **Student Absence Portal**. The Student Absence Portal creates an official record of your absence in support of a formal request for academic consideration and includes a self-attestation, information on the course(s) and course component(s) or assessment(s), and any supporting documentation (as relevant). You can submit your request to the Student Absence Portal here: https://registrar.uwo.ca/academics/academic_considerations/index.html

Students must familiarize themselves with the *University Policy on Academic Consideration – Undergraduate Students in First Entry Programs* posted on the Academic Calendar: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf,

This policy does not apply to requests for Academic Consideration submitted for **attempted or completed work**, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult [Accessible Education](#).

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage:

https://registrar.uwo.ca/academics/academic_considerations/

All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline.

Undocumented absence: All Academic Consideration requests must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make **one** Academic Consideration request **without supporting documentation** in this course. **This will apply to Mastering Geology Quizzes, Lab Assignments and Weekly Forums**, which will be dealt with directly by the Instructor and Teaching Assistants (vs. Academic Advising). **An undocumented absence will not include the assessments listed below:**

The following assessments are **excluded from the use of an undocumented absence**, and **therefore always require formal supporting documentation**:

- Examinations scheduled during official examination periods (i.e. Final Lecture Exam) (Defined by policy)

- Practical laboratory tests (Lab Tests 1 and 2) (Defined by policy)
- Midterm examination (Designated by the instructor as the one assessment that always requires documentation when requesting Academic Consideration)

When a student ***mistakenly*** submits their one allowed Academic Consideration request **without supporting documentation** for the assessments listed above, the request cannot be recalled and reapplied. This privilege is forfeited.

Evaluation Scheme for Missed Assessments

When a student misses the Final Exam and their Academic Consideration has been granted by Academic Advising, they will be allowed to write the Special Examination (the name given by the University to a makeup Final Exam). See the Academic Calendar for details (under [Special Examinations](#)), especially for those who miss multiple final exams within one examination period.

Essential Learning Requirements

Even when Academic Considerations are granted for missed coursework, the following are deemed essential to earn a passing grade.

Note that **you must pass** both the **lecture portion** (combined mark for quizzes, online participation, midterm exam, final exam) **and lab portion** (combined mark for lab assignments, lab tests 1 & 2, and participation in OWL Forums). The **writing of both lecture (midterm and final) exams and both lab tests (1 and 2)** is also **mandatory in order to pass the course**, although it is still possible to pass the course with a failing grade in one or more of these assessments. A passing grade for the course is 50% for all grade components combined.

Where legitimate Academic Considerations are granted for a student, that student will not be penalized for failing to meet a specific requirement. For example, a student who misses one or more labs or quizzes due to illness will be given an opportunity to complete the affected assessments after they recover. For the Final Lecture Exam specifically, it may be permissible for the opportunity to write a makeup to be granted with the next offering of the course, in which case the student will receive a grade of Incomplete (INC) until they complete their course requirements.

6. Additional Statements

Religious Accommodation

When conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing to the course instructor and/or the Academic Advising office of their Faculty of Registration. This notice should be made as early as possible but not later than two weeks prior to the writing or the examination (or one week prior to the writing of the test).

Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays:

<https://www.edi.uwo.ca>.

Accommodation Policies

Students with disabilities are encouraged to contact Accessible Education, 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.

Academic Policies

The website for Registrar Services is <https://www.registrar.uwo.ca/>.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

Electronic devices are permitted for Lab Assignments and Mastering Geology quizzes. However, such devices **will not be permitted on any in-person tests and exams** (e.g. Lab Tests, Midterm Lecture Exam and Final Lecture Exam).

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

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

In the event of health lock-down, 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:

<https://remoteproctoring.uwo.ca>.

Support Services

Please visit the Science & Basic Medical Sciences Academic Advising 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/>.

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

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

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

http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.

Learning-skills counsellors at Learning Development and Success (<https://learning.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.

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: <https://www.uwo.ca/se/digital/>.

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

This course is supported by the Science Student Donation Fund. If you are a student registered in the Faculty of Science or Schulich School of Medicine and Dentistry, you pay the Science Student Donation Fee. This fee contributes to the Science Student Donation Fund, which is administered by the Science Students' Council (SSC). One or more grants from the Fund have allowed for the purchase of equipment integral to teaching this course, including rock and mineral samples and mineral testing equipment. You may opt out of the Fee by the end of September of each academic year by completing the online form linked from the Faculty of Science's Academic Advising site. For further information on the process of awarding grants from the Fund or how these grants have benefitted undergraduate education in this course, consult the Chair of the Department or email the Science Students' Council at ssc@uwo.ca.