

## Syllabus for Geology 9580 (v. 1, December 10, 2025)

### 1. Course Information

#### Geology/Geophysics 9580. Graduate Seminar

- Winter Term
- In person

#### Attendance Requirements

- This is a required course for all new MSc and PhD students in the Department of Earth Sciences.

### 2. Instructor Information

- Instructor: Fred J Longstaffe, Dept. Earth Sciences, [flongsta@uwo.ca](mailto:flongsta@uwo.ca)
- Students must use their Western (@uwo.ca) email addresses when contacting the instructor.
- Office hours with Fred – always welcome but by appointment  
Contact [flongsta@uwo.ca](mailto:flongsta@uwo.ca) to arrange.

General information about enrolling in graduate courses can be found at:

<https://grad.uwo.ca/academics/courses/index.html>

### 3. Course Syllabus, Schedule, Delivery Mode

#### Overview

- Welcome to the 2026 Edition of the Geology / Geophysics 9580 Graduate Seminar!
- I am filling in this year for Dr. Roberta Flemming, who is currently on sabbatical leave. As a one-time pinch hitter, I am not free to 'go wild' with the Seminar's content (*sorry, no lectures on isotopes*)! As has been the long tradition, we will focus on your acquiring the professional and technical skills to produce informative abstracts, compelling research proposals, comprehensive literature searches, clear scientific communications, effective resumes, and 'slam dunk' interview outcomes. We will invite experts to talk to you about some of these topics (I hope they agree to join us!) and you will get practice in all of these activities. For some of you this will be a review of things with which you are already familiar while for others it will be a first full taste of the next level in academe and professional practice more broadly. My hope is that your cohort will develop a strong dynamic of helping each other, not just now, but in the future. Your cohort can become a lasting network throughout your professional life.
- To '*leaven the bread*', I have also added '*Earth Sciences and Society*' and '*Working Life*' segments. These discussions will occur regularly and will be led by you, based on short readings that I will assign.

*More discussion and less lecturing* is my aspirations for our time together. It is **your** level of **engagement** that will make the difference; I will do my best to foster and reward your commitment.

### Course Activities

- The outline below is a guide only. Activities and their timing may change due to class size, availability of guest speakers, extent of discussion arising on topics of greater or lesser interest, class requests, and instructor's whims.

### Session #

- Session 1** (*January 7, 2026*): Introductions, Scope of Activities, Earth Sciences & Society, Working Life
- Session 2** (*January 14, 2026*): *Carpe Diem* (invited guest), Scientific Method, Thesis Proposal, Earth Sciences & Society, Colloquium and Blog, Working Life
- Session 3** (*January 21, 2026*): Critical Reading & Peer Review, Abstracts – Good, Bad and Ugly, Earth Sciences & Society, Working Life
- Session 4** (*January 28, 2026*): Resume Preparation, Interviewing Skills (invited guest), Earth Sciences & Society, Working Life
- Session 5** (*February 4, 2026*): Information Literacy and Library Resources (invited guest), Professional Social Media, Earth Sciences & Society, Working Life
- Session 6** (*February 11, 2026*): Career Paths and the Outside World (invited guests)
- Session 7** (*February 25, 2026*): Mock Interviews (invited guests)
- Session 8** (*March 4, 2026*): Scientific Presentations, Three-Minute Thesis Proposal Presentation, Peer Reviewer Discussions, Working Life
- Session 9** (*March 11, 2026*): Grant Writing (invited guest), Earth Sciences & Society, Working Life
- Session 10** (*March 18, 2026*): Leading and Working in Teams, Project Management (invited guest)
- Session 11** (*March 25, 2026*): Dress Rehearsal of Three-Minute Thesis Proposal presentations and feedback
- Session 12** (*April 1, 2026*): Formal Three-Minute Thesis Proposal presentations and Question period
- Session 13** (*April 8, 2026*): TBA

### Details

- Research Proposal and Peer Review (10 % step 1; 10 % step 2; 15 % step 3): You will formulate a proposal for your proposed research project or thesis at Western. If you have no topic (e.g., entirely course-based

MSc, one will be assigned). The research proposal will include a statement of your objectives and hypotheses, a survey of current literature on the topic, an analysis of how this research will advance that field of enquiry (i.e., anticipated outcomes), a summary of the proposed methodology, an evaluation of the likely significance and impact of your research outcomes for potential users of that new knowledge, and your plans for knowledge translation. In short, you will address the questions of “What?”, “Why?”, “How?” and “Who Cares?”, and you will describe “*how you will get the right information to the right people at the right time and in the right format, so as to influence decision-making.*” <https://www.signalsblog.ca/right-turn-some-knowledge-sharing-about-knowledge-translation-part-1/>

Your preparations will involve three steps: (1) submission of a first draft; (2) consideration of peer-review comments and suggestions, and (3) submission of a revised proposal. For step (2), you will prepare a ‘Letter to the Editor’ in which you summarize how you addressed the major comments of the reviewer or explain why you did not make the reviewer’s suggested changes for comments with which you disagree.

You will also be assigned one of your peer’s research proposals to review constructively both for content and style. You will be evaluated on the quality and substance of your review. This process models current professional peer review practice.

Formats:

- *Research Proposal*: maximum 2000 words of text, double-spaced with 2.54 cm margins, 12-point font, Times New Roman or Arial, maximum 12 pages total including figures and tables, minimum of 15 references (not included in word count)
- *Letter to the Editor response to peer-review*: maximum 750 words of text, double-spaced with 2.54 cm margins, 12-point font, Times New Roman or Arial, maximum 3 pages total
- *Peer Review of Research Proposal*: maximum 500 words of text, double-spaced with 2.54 cm margins, 12-point font, Times New Roman or Arial, maximum 2 pages total

• Three-Minute Thesis Proposal Presentation and Abstract (15 %): Scientific communication frequently involves preparation of short communications such as conference abstracts. You will prepare an abstract to be included in the *Program with Abstracts* for a “Three-Minute Thesis Proposal” course conference. Each student will present a 3-minute non-specialist summary describing and justifying their proposed research followed by a 2-minute question period. The formal presentations will take place during class and a general audience from the department will be invited. Your attendance for the entire session is mandatory and your contributions of relevant questions is also strongly encouraged. The presentations will be rehearsed one week prior to the formal session, with a few minutes allocated for feedback after each presentation. The practice session will not be graded.

Formats:

- *Abstract*: maximum 300 words text, single-spaced with 2.54 cm margins, 12-point font, Times New Roman or Arial; one page maximum, including title, authorship, and key references (maximum 5); may include 1 key figure or table.
- *Three-Minute Thesis Proposal presentation*: maximum three slides

• Earth Sciences & Society Discussions (15 %): You will: (1) lead one or two “Earth Sciences & Society” discussions, based on short articles provided, and (2) have read and participated in a substantive fashion in discussion of other “Earth Sciences & Society” articles. The general approach to leading and discussing the papers will be reviewed in the first class. You will be evaluated on your ability to present key messages and engage others in fruitful discussion, and on your contributions to discussions led by others.

- Resume and Mock Interview (10 %): You will prepare a **two-page** resume, following general guidelines illustrated in class, and take part in a ‘mock interview’ for a position in a ‘mock company’. You will supply your *true* resume to Fred and your interviewer prior to the interview (*see Key Dates below*). The interviewer will be a volunteer from our faculty, staff, alumni, or departmental supporters, depending on their availability. You will be evaluated on the effectiveness of your resume and on your preparation and professionalism during the interview.
- Working Life Discussions (15 %): You will: (1) lead one or two “Working Life” discussions, based on short articles provided, and (2) have read and participated in a substantive fashion in discussion of other “Working Life” articles. The general approach for leading and discussing the papers will be reviewed in the first class. You will be evaluated on your ability to present key messages and engage others in fruitful discussion, and on your contributions to discussions led by others.
- Departmental Colloquium (5%): A departmental requirement for Geology-Geophysics 9580 students is their attendance at Departmental Colloquia. The colloquia are normally held on Fridays from 1:30-2:30 pm in BGS 0153; occasionally there are special lectures on other days and/or other times. Students in 9580 are expected to attend a minimum of 75 % of these colloquia. You are also asked to prepare at least one short Blog about a lecture you attend. *The blog should include one or two photographs if at all possible*. Your Blog(s) may be posted on the course OWL Brightspace page. Some Blog examples will be shown in class for those not familiar with typical formats.

### Key Dates

- Wednesday, January 7, 2026: First class
- Tuesday, February 10, 2026: First draft of your research proposal is **due**; send by email to Fred Longstaffe
- Friday, February 13, 2026: You will receive by email a peer’s research proposal to review
- Friday, February 20, 2026: Your resume is **due**; send by email to Fred Longstaffe and your interviewer
- Wednesday, February 25, 2026: You will participate in a mock interview.
- Wednesday, March 4, 2026: Your peer review of a research proposal is **due**; send by email to Fred Longstaffe
- Thursday, March 5, 2026: You will receive the peer review of your research proposal, sent to you by Fred Longstaffe
- Wednesday, March 25, 2026: Dress-rehearsal presentation of your Three-Minute Thesis proposal
- Thursday, March 26, 2026: The abstract for your Three-Minute Thesis presentation is **due**; send by email to Fred Longstaffe
- Wednesday, April 1, 2026: Formal presentation of your Three-Minute Thesis proposal.
- Friday, April 3, 2026: The revised draft of your research proposal, and the ‘Letter to the Editor’ concerning major revisions made or not made, are **due**. Send both by email to Fred Longstaffe
- Wednesday, April 8, 2026: TBA

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

Although the intent is for this course to be delivered in person, should any university-declared emergency require all or some of the course to be delivered online, either synchronously or asynchronously, the course will adapt accordingly. The grading scheme will **not** change. Any assessments affected will be conducted online as determined by the course instructor.

## 4. Methods of Evaluation

The course grade will be determined based on the following Activities:

- **Scientific Writing and Communication:**
  - Research Proposal (1<sup>st</sup> draft) 10 %
  - Research Proposal (final draft) and “Letter to the Editor” 15 %
  - “Conference” Abstract & “Three Minute Thesis Proposal” Presentation 15 %
- **Earth Science Awareness, Evaluation and Critique:**
  - Peer Review of Research Proposal 10 %
  - Colloquium blog and attendance 5 %
  - “Earth Sciences & Society” discussions 20 %
- **Professionalism and Work/Life Balance:**
  - “Working Life” discussions 15 %
  - Resume and Mock Interview 10 %
- There is no mid-term test or final examination.

## 5. Course Materials

- Course material, as required, will be posted on OWL Brightspace: <http://owl.uwo.ca> .
- Students are responsible for checking the course OWL Brightspace site ( <http://owl.uwo.ca> ) on a regular basis for course material, news and updates. This is the primary method by which information will be disseminated to all students in the class.
- If students need assistance with the course OWL Brightspace site, they can seek support on the [OWL Brightspace 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 (*only in case of shift to on-line status*)**

- Computer and stable internet connection
- If possible, computer with working microphone and/or webcam
- Patience (especially with the pinch-hitting instructor)

## 6. Student Absences

- Students who experience an extenuating circumstance (illness, injury or other extenuating circumstance) sufficiently significant to temporarily render them unable to meet academic requirements may submit a request for academic consideration. Please contact your home department’s Academic Co-ordinator for further details. Individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. In case of extenuating circumstances, students should also

contact the instructor at [flongsta@uwo.ca](mailto:flongsta@uwo.ca). Except for extenuating circumstances, written materials required as part of an “Activity” received more than 120 hours late will not be accepted.

- There are no ‘make-up’ options for a missed Activity.

## 7. Accommodation and Accessibility

### 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 conduct of the Activity.
- 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](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf).

### Academic Policies

- Use of @uwo.ca email: In accordance with policy:  
[https://www.uwo.ca/univsec/pdf/policies\\_procedures/section1/mapp113.pdf](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.
- Requests for Relief (formally known as “appeals”):
  - (1) Policy on Request for Relief from Academic Decision:  
[https://uwo.ca/univsec//pdf/academic\\_policies/appeals/requests\\_for\\_relief\\_from\\_academic\\_decision\\_s.pdf](https://uwo.ca/univsec//pdf/academic_policies/appeals/requests_for_relief_from_academic_decision_s.pdf)
  - (2) Procedures on Request for Relief from Academic Decision (Graduate):  
[https://uwo.ca/univsec//pdf/academic\\_policies/appeals/graduate\\_requests\\_for\\_relief\\_procedure.pdf](https://uwo.ca/univsec//pdf/academic_policies/appeals/graduate_requests_for_relief_procedure.pdf)

### Scholastic Offences

- Policy on Scholastic Offences:  
[https://uwo.ca/univsec//pdf/academic\\_policies/appeals/scholastic\\_offences.pdf](https://uwo.ca/univsec//pdf/academic_policies/appeals/scholastic_offences.pdf)
- Procedures on Scholastic Offences (Graduate):  
[https://uwo.ca/univsec//pdf/academic\\_policies/appeals/graduate\\_scholastic\\_offence\\_procedure.pdf](https://uwo.ca/univsec//pdf/academic_policies/appeals/graduate_scholastic_offence_procedure.pdf)

- **Plagiarism:** Students must write their assignments in their own words. Whenever you take an idea, or a passage from another author, you must acknowledge this both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. **Plagiarism is a major academic offence.**
- All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).
- **Use of Generative AI Tools:** The use of generative AI tools (e.g., ChatGPT, Microsoft Copilot, Google Gemini, or similar platforms) is **not permitted** in the completion of any written assessments for Geology/Geophysics 9580. Using such tools for content generation, code writing, problem solving, translation, or summarization—when not explicitly allowed—will be treated as a **scholastic offence**. The general policy is that if the use of generative AI is permitted for a particular assessment, the conditions of use will be specified by the instructor in advance. If no such permission is granted, students must assume that use is prohibited. It is your responsibility to seek clarification before using any AI tools in academic work.

### Support Services

- General comments and advice about absences, challenges and support can be found at this link: [https://www.uwo.ca/sci/advising/procedures/academic\\_consideration\\_for\\_absences/index.html](https://www.uwo.ca/sci/advising/procedures/academic_consideration_for_absences/index.html)
- 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 (GBSV) and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced GBSV (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](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](mailto:support@uwo.ca).
- 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/>.