

Earth Sciences 3240f - Fall 2024 Course Outline

1. Course Information

Earth Sciences 3240f Global Water Sustainability

Schedule: Tuesday – lectures (Section 001) 10:30 to 12:20 p.m. *****; Tutorial (Section 002) 1:30-2:30 p.m.

Prerequisites: At least 1.0 course equivalent at the 2200 level or higher in Biology, Earth Sciences, Environmental Science, Geography, or permission of the department.

Unless you have either the requisites for this course or written special permission from your Dean's Designate (Department/Program Counsellors and Science Academic Counselling) 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

Instructor: Rob Schincariol, Ph.D., P.Geo.
519-661-2111, ext. 83732, schincar@uwo.ca
Office Hours by appointment – email and a time will be arranged that meets both our schedules.

Graduate Teaching Assistants (GTA's): TBA

Note: Students must use their Western (@uwo.ca) email addresses when contacting their instructors.

3. Course Syllabus, Schedule, Delivery Mode

Description: An exploration of the issues facing the world's fresh water supply. Emphasis will be on major problems in the water arena (e.g., droughts, floods, pollution, population shifts & growth, region specific climate change, conflict, water rights and allocations).

Learning Outcomes

Upon successful completion of this course students will be able to:

- Understand all components of the global hydrologic cycle including precipitation, evapotranspiration, surface water flow, unsaturated zone flow, and ground water flow.
- Understand, and be able to communicate to others, how fresh water is infinitely recyclable, how it is global in scale, and critical shortages or flooding are local in scale.
- View the science of the water cycle in the social context of global usages.
- Make better informed decisions on how we, in a global and local context, use our water in a sustainable manner.
- Improve presentation skills.

Detailed Schedule

Sept. 10	lecture 1 – Introduction
Sept. 17	lecture 2 – Local versus Global concepts
Sept. 24	lecture 3 – Case Studies 1
Oct. 1	lecture 4 – Case Studies 2
Oct. 8	test 1 (10:30 a.m. to 12:20 a.m.) – lectures 1, 2, 3, 4
Oct. 22	lecture 5 – Case Studies 3
Oct. 29	lecture 6 – Case Studies 4

Nov. 5	lecture 7 – Case Studies 5; major paper 1 due
Nov. 12	test 2 – (10:30 a.m. to 12:20 a.m.) lectures 5, 6, 7
Nov. 19	lecture 8 – Group Presentations (also during scheduled Tutorial if needed)
Nov. 26	lecture 9 – Group Presentations (finalized version reflecting comments due by 12:20 p.m.)
Dec. 3	No lecture or lab; major paper 2 due

Contingency plan

Although the intent is for this course to be delivered in person, should any university-declared emergency require some or all 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. Course Materials

All course materials will be provided on the Owl course site.

Students should check OWL (<http://owl.uwo.ca>) 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 Brightspace <https://westernu.brightspace.com/d2l/login>

If students need assistance, 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 – A stable internet connection, computer with working microphone and webcam.

5. Methods of Evaluation

Marking Scheme:

Test 1 (110 minutes)	25%	
Test 2 (110 minutes)	20%	
Major Paper 1 (individual)	25%	
Major Paper 2 (individual)	15%	
Group Presentations	15%	(10% for initial presentation; 5% for final PowerPoint)

NO FINAL EXAM

All tests are scheduled during your normal lecture timeslot (see above). All work must be done independently. Not adhering to these conditions will be considered a scholastic offence. *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:*

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

Major Paper 1 is to be between 1500 and 1750 words. Major Paper 2 is to be between 1000 and 1250 words. More details will follow on topics and format.

Details will follow on Group Presentations format.

Any assignments handed in past the due date will be subject to a penalty of 20% per late day (if you have exceptional circumstances contact the instructor schincarc@uwo.ca prior to due date).

In order to pass the course a passing grade on the Major Papers must be achieved.

6. Student Absences

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the University's medical illness policy at https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

The Student Medical Certificate is available at https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Any absence will be handled with reweighting for Test 1 and Test 2, and an extension for the Major Report. Absence from a Group Presentation will be handled either with a re-assignment or reweighting depending on the situation.

7. Accommodation and Accessibility

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>.

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).

8. Academic Policies

The website for Registrarial Services is <http://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.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

No electronic devices are permitted on tests.

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

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 The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

9. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on add/drop 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 Student Accessibility Services (SAS) 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: <https://www.uwo.ca/se/digital/>.

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