

University of Waterloo
Department of Geography and Environmental Management
GEOG 102 – “Geography and Our Planetary Environment”

Fall 2019
On-Line
Managed by Percy Korsah, Geography

email: pekorsah@uwaterloo.ca
Office Hours: Wednesday 2:00 to 4:00 PM

MOTIVATION:

“What you Learn Here will have Impact at the Ends of the Earth”

COURSE DESCRIPTION: This is an introductory course in the study of the landscape of the earth. We introduce the basic principles of physical geography, identify some of the major geographical questions of current research, and provide a framework for future study. We reach beyond the simple idea that physical geography is knowledge of the names of landforms and places. **We wish to understand the formative processes and how they have significance for human habitation of the planet.**

The place names are the vocabulary. In this course we begin to construct the syntax of physical geography – how these places and features are linked together by processes, energy flow and mass flow.

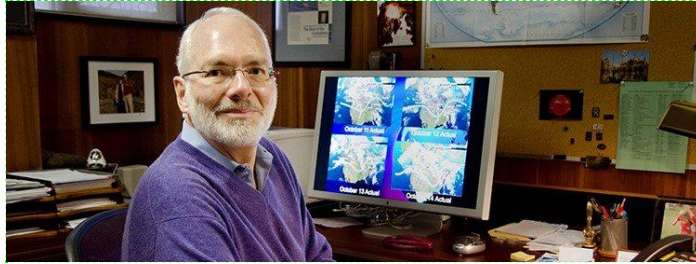
COURSE OBJECTIVE: The major objective of this course is to understand the linkage between all of the physical components of the planet system, how humans are affected by geographical processes, and how humans can modify geographic processes, either intentionally or unintentionally.

UPON COMPLETION OF THIS COURSE THE STUDENT WILL ACHIEVE A BASIS TO:

- 1/ *understand* the principles of planetary processes that affect their daily life. Examples include climate change, weather processes, floods and their impacts, the aesthetic attraction of the physical landscape, earthquakes and their human impact
- 2/ can understand the issues involved in *making informed and articulate decisions* in their future personal and professional life regarding the role humans play in environmental change. Examples include evaluation of the role climate deniers can play in policy formulation, design of flood management policies, design of conservation areas, issues of environmental hazard and relief efforts.

About the Course Author/Instructor

Course Author — Ellsworth LeDrew



Course Author, Ellsworth LeDrew.
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I am delighted to be able to help you learn about some of the processes that shape your planetary environment. This is a personal passion of mine. I have been teaching these topics for over forty years and am always learning new things about how the processes of the environment work, how they are changing through time, and how humans are 'points of leverage' that can cause that change. But I am also learning how we can also help to manage that change.

I studied Honours Science and Geography as an undergraduate at the University of Toronto and then went to study Alpine and Arctic Climate at the Institute for Arctic and Alpine Research at the University of Colorado for my MA and PhD. For my Masters I studied microclimates on the tundra of the mountains of Colorado and for my PhD I modelled the formation of weather systems in the Eastern Canadian Arctic. After a year of postdoctoral studies at what was then the Atmospheric Environment Service in Toronto, I went to the University of Waterloo in 1977 and have been conducting research and teaching there ever since. Some of my research is on the changing polar sea ice measured from satellite imagery and how that change affects regional and global climate processes. For many years we had field camps on the ice in Lancaster Sound to the north of Baffin Island. I also spent many years in the south Pacific diving on coral reefs to determine whether coral bleaching can be quantified using satellite imagery. I got help starting this from Jean-Michel Cousteau in Fiji in the 1990's where we were the first to measure the spectral reflection of damaged corals and tie these measurements to satellites flying overhead. This was followed by several years of work in Palau, Indonesia and East Africa.

I have been very fortunate to travel to many locations over the globe in conducting my work. I have come to appreciate how many things are interconnected globally, and how humans are a common thread in many of these processes. This is a significant lesson in this course: "What you learn here will have an impact at the far ends of the earth". If you can apply that concept to many of the things that you pursue after finishing this course, it will have been a success.

Contact Information

Announcements

Your instructor uses the **Announcements** widget on the **Course Home** page during the term to communicate new or changing information regarding due dates, instructor absence, etc., as needed.

You are expected to read the announcements on a regular basis.

To ensure you are viewing the complete list of announcements, you may need to click **Show All Announcements**.

Discussions

A **General Discussion** topic* has also been made available to allow students to communicate with peers in the course. Your instructor may drop in at this discussion topic.

Contact Us

Who and Why	Contact Details
Instructor and TA <ul style="list-style-type: none">Course-related questions (e.g., course content, deadlines, assignments, etc.)Questions of a personal nature	<p>Post your course-related questions to the Ask the Instructor discussion topic*. This allows other students to benefit from your question as well.</p> <p>Questions of a personal nature can be directed to your instructor or your TA.</p> <p>Instructor: Ellsworth LeDrew ells@uwaterloo.ca (mailto:ells@uwaterloo.ca) +1 519-888-4567 ext. 32783 Office hours: by appointment</p> <p>Your instructor checks email and the Ask the Instructor discussion topic* frequently and will make every effort to reply to your questions within 24–48 hours, Monday to Friday.</p>
Technical Support, Centre for Extended Learning <ul style="list-style-type: none">Technical problems with Waterloo LEARN	<p>learnhelp@uwaterloo.ca (mailto:learnhelp@uwaterloo.ca?body=Name:%20%0D%0AUser%20ID:%20%0D%0ACourse:)</p> <p>Include your full name, WatIAM user ID, student number, and course name and number.</p> <p>Technical support is available during regular business hours, Monday to Friday, 8:30 AM to 4:30 PM (Eastern Time).</p> <p>LEARN Help Student Documentation (https://uwaterloo.ca/learn-help/students)</p>
Learner Support Services, Centre for Extended Learning <ul style="list-style-type: none">General inquiriesWatCards (Student ID Cards)Examination information	<p>Student Resources (https://uwaterloo.ca/extended-learning/learn-online/student-resources)</p> <p>extendedlearning@uwaterloo.ca (mailto:extendedlearning@uwaterloo.ca?body=Name:%20%0D%0AUser%20ID:%20%0D%0ACourse:) +1 519-888-4002</p> <p>Include your full name, WatIAM user ID, student number, and course name and number.</p>

Materials and Resources

Textbook(s)

Required

1. Christopherson, Robert W., Ginger H. Birkeland, Mary-Louise Byrne, Philip T. Giles, 2018, *Geosystems: An Introduction to Physical Geography, updated 4th Canadian Edition*, Pearson Education, Canada.

Previous editions are acceptable, however the page numbers in the course schedule will not be correct.

2. In Module 10, you will watch *Amazing Planet: Born of Fire* (<https://www.amazon.com/Amazing-Planet-Season-1/dp/B004GOJ31I>) (note: there is a \$1.99 fee to access this resource).

For textbook ordering information, please contact the **W Store | Course Materials + Supplies** (<https://wstore.uwaterloo.ca/>) .

For your convenience, you can compile a list of required and optional course materials through **BookLook** (<https://fortuna.uwaterloo.ca/cgi-bin/cgiwrap/rsic/book/index.html>) using your Quest userID and password. If you are having difficulties ordering online and wish to call the Waterloo Bookstore, their phone number is +1 519-888-4673 or toll-free at +1 866-330-7933. Please be aware that textbook orders **CANNOT** be taken over the phone.

Resources

- [Library services for Co-op students on work term and Extended Learning students](https://uwaterloo.ca/library/services/co-op-students-work-term-and-extended-learning-students) (<https://uwaterloo.ca/library/services/co-op-students-work-term-and-extended-learning-students>)

IMPORTANT NOTICE REGARDING FINAL EXAMINATION AND PASSING GRADE FOR THE COURSE:

The final examination is worth 30% of the final grade; however, you must pass the final examination with 15 out of 30 to pass the class. If you do not pass the final examination, the most you can attain for the class will be 49% of 100 marks. What this means is that your marks will be added up and if you get more than 49%, your mark will be set to 49%.

There is good academic reason for this. On campus there are normally two proctored mid-terms tests plus a final examination. In addition, there are invigilated quizzes.

With the on-line model there is only the proctored final examination. Other assessments are not invigilated.

Therefore, on-line there is less weighting on tests that assess your knowledge and understanding of the material and a greater reliance on interactive and experiential learning, which has its own positive aspects and benefits. Hence, we must ensure that passing the course reflects appropriate assessment of course content and therefore you must pass the final examination.

Grade Breakdown

The following table represents the grade breakdown of this course.

Activities and Assignments	Weight (%)
Introduce Yourself	Ungraded
Quizzes (5)	20%
Photo Assignments (3)	15%
Discussions (5)	20%
Discussion Summaries (3)	15%
Final Examination	30%

GOOGLE ANALYTICS

Note: The dates in the following schedule have been updated for Fall 2019, but I have limited access to Contensis to retrieve content. The dates provided were for the spring 2019 term. All other aspects of the schedule will be similar.

Course Schedule

IMPORTANT: ALL TIMES EASTERN - Please see the [University Policies \(university-policies.aspx\)](#) section of your Syllabus for details

	Module	Readings (4th ed.)	Activities and Assignments	Due Dates	Weight (%)	SELECT
Week 1	Module 01: Course Introduction		Check group membership for Discussions			
	Module 02: Earth System Science	pp. 6–39	Introduce Yourself			
Week 2	Module 03: Radiant Energy Source for the Planet	pp. 42–43; 45–63	Discussion 1	Due Sunday, May 19 at 11:55 PM	4%	
			Practice Quiz 1			
Week 3	Module 04: The Greenhouse Effect and Climate Change	pp. 91; 94–107; 112–115 Watch: <i>THIN ICE: The Inside Story of Climate Science</i>	Photo Assignment 1	Due Sunday, May 26 at 11:55 PM	5%	
			Marked Quiz 1	Due Sunday, May 26 at 11:55 PM	4%	
Week 4	Module 05: Selected Temperature Controls of the Planet	pp. 119–134				
	Module 06: Water and Climate	pp. 182–189; 203	Practice Quiz 2			
Week 5	Module 07: Atmospheric Stability	pp. 190–194; 203–204	Discussion 2	Due Sunday, June 9 at 11:55 PM	4%	
			Marked Quiz 2	Due Sunday, June 9 at 11:55 PM	4%	
Week 6	Module 08: Precipitation	pp. 209–216; 237–239	Discussion Summary 1	Due Sunday, June 16 at 11:55 PM	5%	
		pp. 194–199; 203–204				

	<u>Module 09: Weather Patterns</u>	pp. 148–162; 174–177 pp. 216–220; 237–239	<u>Discussion 3</u>	Due Sunday, June 16 at 11:55 PM	4%
			<u>Photo Assignment 2</u>	Due Sunday, June 16 at 11:55 PM	5%
			<u>Practice Quiz 3</u>		
Week 7	<u>Module 10: The Lithosphere</u>	pp. 347–354; 379–381 Watch: <i>Amazing Planet: Born of Fire</i>	<u>Marked Quiz 3</u>	Due Sunday, June 23 at 11:55 PM	4%
	<u>Module 11: The Geological Cycle and the Rock Cycle</u>	pp. 375–377; 355–363; 379– 381			
Week 8	<u>Module 12: Crustal Move- ment and Plate Tectonics</u>	pp. 363–375; 379–381			
Week 9	<u>Module 13: Fluvial Process- es</u>	pp. 452–462; 486–489 Watch: <i>An Ocean of Volcanoes</i>	<u>Discussion 4</u>	Due Sunday, July 7 at 11:55 PM	4%
			<u>Practice Quiz 4</u>		
Week 10	<u>Module 14: Streamflow Characteristics</u>	pp. 459–478; 486–489	<u>Discussion Summary 2</u>	Due Sunday, July 14 at 11:55 PM	5%
	<u>Module 15: Fluvial Land- scapes</u>	pp. 468–478; 486–489	<u>Marked Quiz 4</u>	Due Sunday, July 14 at 11:55 PM	4%
Week 11	<u>Module 16: Glaciers and En- vironmental Change</u>	pp. 324–328 pp. 553–554; 558–561; 564– 567			
	<u>Module 17: Glacial Process- es</u>	pp. 534–543; 564–567			
Week 12	<u>Module 18: Glacial Land- forms</u>	pp. 544–550; 564–567	<u>Discussion 5</u>	Due Sunday, July 28 at 11:55 PM	4%
			<u>Photo Assignment 3</u>	Due Sunday, July 28 at 11:55 PM	5%
			<u>Practice Quiz 5</u>		
	<u>Module 19: The Pleistocene and Environmental Change</u>	pp. 553–558; 564–567 pp. 317–320	<u>Discussion Summary 2</u>	Due Tuesday, July 30 at 11:55 PM Due Sunday, July 28 at 11:55 PM	5%

			Marked Quiz 5	Due Tuesday, July 30 at 11:55 PM	4%
				Due Sunday, July 28 at 11:55 PM	
Final Examination					30%

Final Examination Arrangements and Schedule

Please carefully review the information about [writing exams \(https://uwaterloo.ca/extended-learning/learn-online/write-exams\)](https://uwaterloo.ca/extended-learning/learn-online/write-exams) for online courses, including dates, locations, how to make examination arrangements, writing with a proctor, and deadlines.

If you are taking **any on-campus courses**, you will automatically be scheduled to write your exam on campus. No action is required.

If you are taking **only online courses**, do one of the following:

- If your **address in QUEST is within 100 km** of an [examination centre \(https://uwaterloo.ca/extended-learning/learn-online/write-exams/exam-centres\)](https://uwaterloo.ca/extended-learning/learn-online/write-exams/exam-centres), you must choose an exam centre in [Quest \(https://uwaterloo.ca/quest/\)](https://uwaterloo.ca/quest/) by **Sunday, May 19, 2019**. This must be done each term.
- If your address in Quest is **more than 100 km from an exam centre**, you must **arrange for a proctor**. Please review the guidelines and deadlines for [writing with a proctor \(https://uwaterloo.ca/extended-learning/learn-online/write-exams/writing-proctor\)](https://uwaterloo.ca/extended-learning/learn-online/write-exams/writing-proctor). This must be done each term.

Your online course exam schedule will be available in Quest approximately four weeks before your exam date(s). Instructions on how to find your schedule are posted on the [Quest Help \(https://uwaterloo.ca/quest/help/students/how-do-i/online-exam-schedule\)](https://uwaterloo.ca/quest/help/students/how-do-i/online-exam-schedule) page.

University of Waterloo Senate-approved [academic regulations related to assignments, tests, and final exams \(https://uwaterloo.ca/registrar/final-examinations/examination-regulations-and-related-matters\)](#) can be found on the Registrar's website.

Official Grades and Course Access

Official Grades and Academic Standings are available through [Quest \(https://uwaterloo.ca/quest/\)](https://uwaterloo.ca/quest/).

Your access to this course will continue **for the duration of the current term**. You will not have access to this course **once the next term begins**.

Course and Department Policies

Course Policies

Late Policy

Missing Assignments and Examinations: If an assignment is delayed due to a valid medical reason, personal or family emergency, etc., contact me immediately, and promptly obtain a University of Waterloo medical or counselor's note explaining the reason for your absence, degree of incapacitation, dates covered by the note, etc. Please immediately provide the scanned copy of the note to me by email (a photo with your digital device will be sufficient) and mail me the original. I need a scanned copy sent by email plus the original copy sent by snail mail.

For a delayed assignment with an approved excuse, I normally allow an extra week for completion.

If there is not a valid excuse, or the submitted excuse is not acceptable as determined by the course professor, the assignment will be assigned half marks if completed within a week of the normal deadline and zero after that. A missed examination without an approved medical excuse will be assigned zero.

Intellectual Property

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo.

Intellectual property includes items such as:

- Lecture content, spoken and written (and any audio/video recording thereof);
- Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and
- Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the property owner's permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).

Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights.

Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may have already given their consent).

Communication

SELECT

All communication with students must be through either the student's University of Waterloo email account or via Learn. If a student emails the instructor or TA from a personal account they will be requested to resend the email using their personal University of Waterloo email account.

Academic Integrity

In accordance with University Procedures, the following checklist must be reviewed, signed and submitted with each written assignment for this course. Please copy this text into a cover page for each of your written assignments.

Assignment Checklist

Please read the checklist below following the completion of each assignment. Once you have verified these points, hand in this signed checklist with each assignment.

1. I have referenced and footnoted all ideas, words or other intellectual property from other sources used in the completion of this assignment.
2. I have included a proper bibliography, which includes acknowledgement of all sources used to complete this assignment.
3. This assignment was completed by my own efforts and I did not collaborate with any other person for ideas or answers.
4. This is the first time I have submitted this assignment or essay (either partially or entirely) for academic evaluation.

Signed: _____ Date: _____

Print Name: _____ UW-ID# _____