

GEOG 2132B – Digital Earth

Course Outline: Section 001 Winter 2025

This course is taught in-person

1. Course Information

*Details about design and delivery of the course are listed below in Section 6



Classes Start	Spring Reading Week	Classes End	Study day(s)	Exam Period
January 6	February 17-23	April 4	April 5 & 6	April 7-30

January 14, 2025: Last day to add a second-term half course

February 17, 2025: Family Day

March 31, 2025: Last day to drop a second term half course without penalty



Course Instructor	Contact Information	Office Hours
James Voogt	javoogt@uwo.ca	Thursdays 11:30 – 12:30

Teaching Assistant(s)	Contact Information	Office Hours
Tasha Roswell	troswell@uwo.ca	See course OWL site

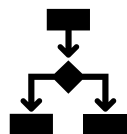


Office hours for the course instructor will be held in person. Office hours for the Teaching Assistants will be held in-person and may also include a remote option – see the OWL course site for details.

To meet with the course instructor outside of scheduled office hours please email in advance to set up a day and time.

2. Calendar Description

This course uses online digital imagery and topography to access, analyze and interpret Earth surface landscapes and landscape change. Students are introduced to the use of digital landscapes, images and visualization software to explore and analyze the origin and development of selected landscapes in response to natural and human forces.



2 lecture hours, 1 tutorial hour; 0.5 course

Antirequisite(s): None

Prerequisite(s): None

Prerequisite checking is the student's responsibility

Senate Regulations state, “unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will 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.”

Note: this course serves as part of the ‘alternate entry route’ to Geography and Environment Modules

3. Textbook

☒ There is no required textbook for the course. Some relevant resources available from the UWO Library and other materials will be available from OWL.

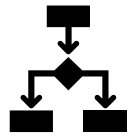


☒ Additional Resources: Google Earth software (free) is required for this course. We will predominantly use Google Earth Pro on desktop (available in Geography and Environment computer labs and available free for PC, Mac or Linux from <https://www.google.com/earth/about/versions/#earth-pro>)

4. Course Objectives and Format

This course provides an introduction to the physical processes underlying weather and climate on time and space scales ranging upwards from the local to the global, with a particular emphasis on the formation of mid-latitude cyclones. Laboratories include use of meteorological data, maps, charts, simple instrumentation, graphical tools and numerical computation.

☒ The course will use iClickers for participation and practice questions.



Lecture and lab material will be posted to the new OWL Brightspace learning environment: <https://westernu.brightspace.com/d2l/home>. Any changes will be indicated on the OWL site and discussed with the class.

Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

If students need assistance, 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.

5. Learning Outcomes

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

- Develop knowledge and critical understanding of the fundamental characteristics, processes, temporal changes and landscapes of social and biophysical systems and their interactions. (Introduce)
- Demonstrate informed awareness of geographical diversity through knowledge of different places and understanding of the processes that shape them spatially and over time. (Introduce)
- Synthesize and evaluate geographical information from diverse sources, including geo-spatial data (Introduce)
- Collect, analyze and interpret geographical and geo-spatial data in relation to social and biophysical systems (Introduce)





- Map, remote sensing images and geo-spatial data interpretation and analysis (Introduce)
- Spatial thinking, spatial analysis & spatial processes of human and/or environmental processes (Introduce)
- Visual presentation and graphical design: graphical design and production of: maps, diagrams, presentations, posters, web-based media (Introduce)

6. Course Content and Schedule



Wk	Dates	Lecture Topic	Tutorial Topic
1	Jan 6-10	Introduction: Course Outline, Physical Geography Basics, Coordinate Systems	Google Earth Pro, Online topographic maps & other resources
2	Jan 13-17	Global Landforms- Tectonic Forces, Mountains, earthquake and volcanic features	Endogenic Landforms (A)
3	Jan 20-24	Global Climate Controls, Biomes & Exogenic Processes	On-line digital information on climate and climate change
4	Jan 27-31	Mass movements	Mass Movements (A)
5	Feb 3-7	Glaciers	Glaciers & Glacial Landforms (A)
6	Feb 10-14	River Systems	Rivers & Fluvial Landscapes (A)
	<i>Feb 17-21</i>	<i>Reading Week</i>	
7	Feb 24-28	Coastlines	Coasts and Shorelines (A)
8	Mar 3-7	Landscape Changes: Water resources & Energy	Landscape Changes (A)
9	Mar 10-14	Landscape Changes: Forests & Agriculture	Prep for Group Presentations
10	Mar 17-21	Landscape Changes: Urbanization	Prep for Group Presentations
11	Mar 24-28	Group Presentations	
12	Mar 31- Apr 4	Group Presentations	

A = Assignment

7. Communication



- Students should check the OWL site every 24 – 48 hours
- For any other communication, 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 his/her official university address is attended to in a timely manner. You can read about the privacy and security of the UWO email accounts [here](#).
- Emails will be monitored daily; students will receive a response in one business day (24 hrs for emails received between 08:00 to 4:00 pm Friday; response times may be slower on weekends)

8. Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated.

Assessment	Format	Weighting	Due Date
Assignments (best 5 of 6)	Written	50	Two weeks from date assigned
Group Presentation	Oral	20	Last 2 weeks of term
Group Presentation	Written Submission	20	At end of oral presentation
Participation	iClicker	10	Throughout term

All assignment due dates have a 48 hour submission window. See Section 9 for Accommodation Policies.

The evaluation methods described in the course outline are essential requirements for the course.



Students are responsible for material covered in the lectures as well as the assigned chapters/sections in the text.

Students must complete at least 4 assignments to pass the course.

- All assignments are due at the start of the tutorial session two weeks from when they were assigned unless otherwise specified
- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days

Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable

F	below 50	Fail
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Grades **will not be adjusted** on the basis of need. It is important to monitor your performance in the course. Remember: *You* are responsible for your grades in this course.

9. 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 accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).

General Information about missed work:

University policy on academic considerations are described [here](#). This policy requires that all requests for academic considerations must be accompanied by a self-attestation. Further information about academic considerations, and information about submitting this self-attestation with your academic consideration request may be found here.

Please note that any academic considerations granted in this course will be determined by the instructor, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline.

Formal Documentation Designation statement:

No assignments or labs in this course are designated as requiring formal documentation.

Flexibility statements

The 6 assignments for this course have a 48 hour submission window.

Please note that because the submission deadlines for labs and assignments already includes flexibility in the form of a 48 hour submission window, the instructor reserves the right to deny academic consideration for assignments which are submitted following the end of the period of flexibility.

Absence from Course Commitments

Students must familiarize themselves with the [Policy on Academic Consideration – Undergraduate Students in First Entry Programs](#)

Students missing course work for medical, compassionate or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic consideration request per course per term without supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g. December and April exams) and for practical laboratory and performance tests typically schedule during the last week of the term. Students should also note that the instructor may

designate one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline. Supporting documentation for academic considerations for absences due to illness should use the Student Medical Certificate or, where that is not possible, equivalent documentation by a health care practitioner.

Course Assessments that Require Supporting Documentation

For this course the following assessment has been designated as requiring supporting documentation:

Academic Consideration for Course Components with Flexible Deadlines

Assignments

This course has 6 assignments with the top 5 assignments counted towards your final grade. Academic consideration will not be granted for missed labs. If students miss 1 assignment, the remaining 5 assignments will be used in the calculation of the final lab grade. If students miss more than 2 assignments, they will receive a grade of zero on each missed assignment.

Participation

The course uses iClickers to assess participation. Participation will be counted beginning Jan 20. The participation is based on responses (not correct answers) to questions posed in lectures. The participation mark will be based on the total number of questions given over the term, scaled such that a response to 80% of the questions posed will yield a participation mark of 100%. This approach recognizes that students may miss an occasional lecture due to illness etc. No academic accommodations are provided for missed participation questions unless there is a long term academic consideration.

Accommodation for Religious Holidays

Students should review the policy for Accommodation for Religious Holidays. Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

10. Make-up Examinations

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents.

The format and content of make-ups may differ substantially from the scheduled test or examination.

11. Use of Electronic Devices

This course does not use tests or examinations as part of the evaluation.

Geog 2132b will use iClickers, an audience response device. iClicker is Western's officially-supported audience response system. It supports both virtual and physical clickers.

To create an account please follow the instructions at <https://wts.uwo.ca/iclicker/>

If you already have an iClicker account, do not create a duplicate account, use the existing account and follow the instructions provided on the webpage.

Once your account is created, you can participate using iClicker using a 'virtual clicker' by way of a mobile app (Android or iOS mobile device) or web browser. These are free. Or you can purchase a physical clicker from The Book Store.

We will use the iClicker system to encourage participation and active learning. Questions posed using the system will provide you examples of the types of questions to be used on the exams. The participation mark will be based on responses to questions using the iClicker system (the participation mark is based on a response, rather than a correct vs incorrect answer). See the section on Participation for how this component is evaluated.

iClickers can only be used by the account owner, clicker misuse (including use by a student other than the owner) is considered a form of Scholastic Offence

iClicker uses an external account. Student responses are anonymized when displayed. Responses associated with the participation mark are treated in a similar manner to all other marked components of the course and are only available to the student, instructor and TAs.

Guidelines for Students on the use of Personal Response Systems ("Clickers")

Personal Response Systems ("clickers") may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning.

Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else's clicker in class constitutes a scholastic offence,
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

12. How to Be Successful in this Class:

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

1. Take notes as you go through the lesson material. Powerpoint lecture slides are provided but often have little text. Adding notes to these, either in the provided pptx file or in a separate document or notebook will help you learn more effectively.
2. The course focuses on the lecture and laboratory material – use the text to help understand this material and to broaden the context for what we examine in lecture and lab.
3. Check out the additional resources provided on OWL to supplement lectures and labs.
4. Use the textbook online resources to access other materials supporting the course and for checking your knowledge (self-test) – but remember the course focuses on the lecture and lab material covered – rather than a test of the textbook.
5. Connect with others. Try forming a study group and try meeting on a weekly basis for study and peer support.
6. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards, read the text and/or supplementary materials. For help with labs, use office hours held by your teaching assistant and for help with lecture material use office hours held by the course instructor.
7. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.



13. Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

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.

14. Western's Commitment to Accessibility

The Department of Geography and Environment strives at all times to provide accessibility to all faculty, staff, students and visitors in a way that respects the dignity and independence of people with disabilities.

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 519-661-2147 for any specific question regarding an accommodation. Information regarding accommodation of exams is available on the Registrar's website.

More information about "Accessibility at Western" is available.

15. Mental Health

If you or someone you know is experiencing distress, there are several resources here at Western to assist you. Please visit Western's Health and Wellness website for more information on mental health resources.

16. Support Services

Western's Support Services
Student Development Centre

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.

17. Important Dates

Monday January 6: Classes resume

Tuesday January 14: Last day to add a second term half course

Monday February 17: Family Day – Department Office Closed

February 17-23: Spring Reading Week (No classes; Department Office open)

Friday March 7: Last day to drop a second term half course

Friday April 4: Classes end

April 5 and 6: Study days

April 7-30: Examination Period