



Course Number	LAND 608	Classroom	TBD
Course Name	Landscape Responses to Climate Change, Energy and Water		
Pre/Co-Requisites	N/A		
Instructor	Dr. Mary-Ellen Tyler	Office Hours/Location	PF2105 By Appointment
	Email: tyler@ucalgary.ca	Phone: (cell) 403-804-9252	
Class Dates	Friday 9:00am – 1:00pm (in-person classes)		
Instructor Email Policy	All course communications will be through your @ucalgary email, and I will respond to emails sent via student's @ucalgary emails within 48 hours before 8pm and Monday -Friday.		

Course Description

This course explores a spatial systems approach to climate change adaptation at a regional landscape scale using network analysis and swarm theory to understand landscape change. The course focuses on four areas:

- regional landscape change,
- landscape responses to climate change,
- regional scale spatial landscape design based on projective ecologies.

A 'virtual' regional field trip will assist in identifying and illustrating specific climate change and landscape change issues in Calgary's regional landscape. Course participants will work through 4 assignments to explore the inter-relationships and synthesis among landscape and landscape change processes and will present their work for in class discussion and peer teaching.

Course Hours: 3 units; (2-1Tutorial)

Course Learning Outcomes

By the end of this course, students will be able to:

1. Understand basic cross-scalar landscape change processes and driving forces.
2. Understand the nature of regional climatic, hydrologic, and ecological system inter-connections.
3. Understand the potential role for spatial design in climate change adaptation
4. Understand the dynamics process and form over time and future landscape visualization

Learning Resources.

Readings and related course resources will be provided on the course D2L.

Technology requirements

Students are required to have reliable access to the following:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Broadband internet connection
- For additional information see [Student IT Resources](#)

Additional Classroom Conduct and Related Information

Students are expected to participate actively in all class activities. Students are expected to behave in a professional manner during classes and demonstrate behaviour in class that promotes and maintains a positive and productive learning environment.

Assessment Components

Assessment Method	Description	Weight	Aligned Course Learning Outcome
Assignment #1	Landscape Analysis + Regional Site Selection	20	1
Assignment #2	Swarm Theory + Landscape Pattern	25	2
Assignment #3	Landscape Connectivity	25	1,3
Assignment #4	Projective Ecology + Design Intervention	30	4

Assessment and Evaluation Information

Attendance and Participation Expectations:

Attendance at classes and in course field trips is expected and required unless there are medical or formal accommodation situations. If you know you are not going to be able to attend a class or go on a field trip due to unexpected circumstances, please contact the Instructor by phone/text/email preferably in advance of your absence if possible. If you are absent from two consecutive classes or field trips or fail to submit two consecutive assignments without contacting and advising the Instructor of your situation, then you may be required to withdraw from the course. Participation in any group work will be carefully monitored by the Instructor to ensure a full contribution by all group members. Any group issues/problems that you feel require attention should be reported immediately either by private appointment or via email to the Instructor in order to find a constructive solution as quickly as possible

Guidelines for Submitting Assignments:

Assignments will be submitted digitally to a D2L Drop Box using only U of C email addresses.

Final Examinations

There is no final examination. Evaluation is based on a combination of term Assignments.

Expectations for Writing

(<https://www.ucalgary.ca/pubs/calendar/current/e-2.html>):

Late Assignments:

No late assignments will be accepted unless approved in advance by the instructor or if due to medical reasons, compassionate grounds or under U of C Accommodation policy.

Criteria that must be met to pass:

In order to pass the course a passing grade must be obtained on all required components of the course.

Grading Scale

Grade	Grade Point Value	4-Point Range	Percent	Description
A+	4.00	4.00	95-100	Outstanding - evaluated by instructor
A	4.00	3.85-4.00	90-94.99	Excellent - superior performance showing comprehensive understanding of the subject matter
A-	3.70	3.50-3.84	85-89.99	Very good performance
B+	3.30	3.15-3.49	80-84.99	Good performance
B	3.00	2.85-3.14	75-79.99	Satisfactory performance
B-	2.70	2.50-2.84	70-74.99	Minimum pass for students in the Faculty of Graduate Studies
C+	2.30	2.15-2.49	65-69.99	All final grades below B- are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements.
C	2.00	1.85-2.14	60-64.99	
C-	1.70	1.50-1.84	55-59.99	
D+	1.30	1.15-1.49	50-54.99	
D	1.00	0.50-1.14	45-49.99	
F	0.00	0-0.49	0-44.99	

A student who receives a "C+" or lower in any one course will be required to withdraw regardless of their grade point average (GPA) unless the program recommends otherwise. If the program permits the student to retake a failed course, the second grade will replace the initial grade in the calculation of the GPA, and both grades will appear on the transcript.

The School of Architecture, Planning and Landscape will not permit the Flexible Grade Option (CG Grade) for any course offered by the School. (<https://www.ucalgary.ca/pubs/calendar/current/salp-3-3.html>)

Topic Areas & Detailed Class Schedule

Please note: this schedule is subject to modifications. The final schedule and studio prospectus will be provided on the first day of class January 13, 2023.

* Schedule subject to change due to unforeseen circumstances OR class agreement

PLEASE DO NOT MAKE ANY TRAVEL OR WORK PLANS THAT CONFLICT WITH THIS SCHEDULE

Course Schedule Date	Topic	Assignments/Due Dates
WEEK 1 January 13	1 st Class: Course Outline Climate Change at the Landscape level?	
WEEK 2 January 20	Landscape Process and Form Landscape Ecology Basics Assignment 1 Demonstration	
WEEK 3 January 27	Understanding Calgary Area Landscapes Landscape Pattern and Connectivity	Possible Field Trip Weather Dependent
WEEK 4 February 3	Assignment 1 Presentations Swarm Theory and Network Theory Part 1 Assignment 2 Demonstration	Assign#1 DUE
WEEK 5 February 10	Swarm Theory and Network Theory Part 2 Assignment 2 Tutorials	
WEEK 5 February 17	Assignment 2 Presentations Assignment 3 Demonstration	Assign#2 DUE
WEEK 6 February 20 -24	NO CLASSES Mid-Term Break	
WEEK 7 March 3	Design Intervention + Projective Ecologies Assignment 3 Tutorials	
WEEK 8 March 10	Assignment 3 Presentations Assignment #4 Demonstration	Assign#3 DUE
WEEK 9 Mar 13 - 17	NO CLASSES SAPL Block Wk	
WEEK 10 March 24	Assignment 4 Tutorials	
WEEK 11 March 31	Assignment 4 Presentations	LAST LAND 608 CLASS Assign#4 DUE
WEEK 12 Friday April 7	NO CLASSES Good Friday U of C closed	

University of Calgary Policies and Supports

COVID-19 PROCEDURE FOR SICK STUDENTS: <https://www.ucalgary.ca/risk/covid-19-procedure-for-sick-students>

UNIVERSITY OF CALGARY COVID-19 UPDATES: <https://www.ucalgary.ca/risk/emergency-management/covid-19-response>

ACADEMIC ACCOMMODATION

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: <https://www.ucalgary.ca/legal-services/university-policies-procedures/student-accommodation-policy>

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: <https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure>

Students needing an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to their instructor (contact information on first page above).

SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/.

ACADEMIC MISCONDUCT

Academic Misconduct refers to student behavior which compromises proper assessment of a student's academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

For information on the Student Academic Misconduct Policy and Procedure please visit:

<https://ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf>

<https://ucalgary.ca/policies/files/policies/student-academic-misconduct-procedure.pdf>

Additional information is available on the Academic Integrity Website

at <https://ucalgary.ca/student-services/student-success/learning/academic-integrity>.

COPYRIGHT LEGISLATION:

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this

policy may be disciplined under the Non-Academic Misconduct Policy (<https://www.ucalgary.ca/pubs/calendar/current/k.html>).

INSTRUCTOR INTELLECTUAL PROPERTY

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

SEXUAL VIOLENCE POLICY

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. The University of Calgary's sexual violence policy guides us in how we respond to incidents of sexual violence, including supports available to those who have experienced or witnessed sexual violence, or those who are alleged to have committed sexual violence. It provides clear response procedures and timelines, defines complex concepts, and addresses incidents that occur off-campus in certain circumstances. Please see the policy available at <https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>

UNIVERSITY STUDENT APPEALS OFFICE: If a student has a concern about a grade that they have received, they should refer to Section I of the Undergraduate Calendar (<https://www.ucalgary.ca/pubs/calendar/current/i-3.html>) which describes how to have a grade reappraised. In addition, the student should refer to the SAPL's Procedure for reappraisal of grades

OTHER IMPORTANT INFORMATION

Please visit the Registrar's website at:

<https://www.ucalgary.ca/registrar/registration/course-outlines> for additional important information on the following:

- Wellness and Mental Health Resources
- Student Success
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk