

Landscape Response to Climate Change, Energy and Water

EVDL 639

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Introduction

This course identifies landscape-oriented solutions to local and global issues of climate change, energy, and water problems through research and project proposals. Provides the opportunity to identify the most pressing local, regional, or international issues and develop solutions.

Objectives

- To acquire a basic knowledge of cross-scalar landscape change processes
- To understand the nature of regional climatic, hydrologic, and energy systems
- To acquire a basic knowledge of the potential role for design in climate change adaptation

Teaching Approach

The course is organized around three main areas: landscape change mechanisms, landscape responses to climate change, climate change adaptation. Field trips and site visits will be used to illustrate specific issues in the regional landscape. A projective ecologies approach will be used to explore the inter-relationships and synthesis among these three areas. Each topic area will be presented through introductory lectures and 3 assigned exercises. Course participants will work through each of these three assignments/exercises and present their work in class for discussion.

Content: Topics and Class Schedule

PLEASE NOTE: This Schedule may be modified due to unexpected and uncontrollable events or through class discussion and class agreement.

Week 1: Friday, September 16, 2016 - FIRST CLASS

- Review of course outline
- ***Scheduling opportunities for 1 or 2 Field Trips?**
- Overview OF Exercises 1, 2, and 3
- Landscape + Climate Change in Social Ecological Systems

Week 2: Friday, September 23 – CLASS CANCELLED DUE TO PORTLAND STUDIO TRIP

Week 3: Friday, September 30

- Exercise # 1 (Landscape Change) Discussion
- Landscape change processes/mechanisms (Part 1)
- Landscape change theories (Part 1)

Week 4: Friday, October 7 - Possible Field Trip?

- Landscape change processes/mechanisms + change theories (Part 2)

Week 5: Friday, October 14 – NO CLASS – EVDS BLOCK WEEK

Week 6: Friday, October 21

- **Exercise # 1 DUE!**
- **In-class presentations**
- Water and Energy in the Landscape

Week 7: Friday, October 28

- **Exercise # 2 (Climate Change Adaptation) Discussion**
- Water and Energy in the Landscape

Week 8: Friday, November 4

- **Exercise #2 Site Visits**
- **Exercise #2 Tutorials**

Week 9: Friday, November 11 – NO CLASS – REMEMBRANCE DAY

Week 10: Friday, November 18

- **Exercise 2 (Climate Adaptation) DUE!**
- **In-class presentations**

Week 11: Friday, November 25

- **Framing Landscape Change and Climate Adaptation as a design problem**
- Projective ecologies (theory)

Week 12: Friday, December 2

- **Exercise #3 (Synthesis) Discussion**
- Projective ecologies (applications)

Week 13: Friday, December 9 – LAST DAY OF CLASS*

- **Exercise 3 tutorials**

THE FINAL PRESENTATION OF EXERCISE 3 WILL BE MONDAY, DECEMBER 12 12:30-4:30PM IN RM 2110:

PLEASE NOTE: You are required to attend this final presentation. Please make sure that you do not make any travel or work-related commitments that would conflict with this scheduled presentation time on December 12.

Means of Evaluation

The course grade will be based on the evaluation of the 3 assigned exercises and includes written and visual components of the work and presentation of the work:

Exercise 1: Landscape Change Mechanisms	
- Literature Search	10%
- Written evaluation/synthesis results	10%
- Power point presentation of results	<u>10%</u>
	<u>30%</u>

Exercise 2: Climate Change Adaptation	
- Literature Search	10%
- Site selection and analysis	10%
- Written evaluation/synthesis	10%
- Power point presentation of results	<u>10%</u>
	<u>40%</u>

Exercise 3: Synthesis	
- Projective Ecologies Framework	15%
- Power point presentation	<u>15%</u>
	<u>30%</u>

Total 100%*

*Please note that a passing grade is required for Exercise #3 for a passing grade in the course.

Completed course exercises should be submitted to the Instructor by email on due dates assigned. Late work will not be accepted unless prior agreement with the Instructor has been made for medical reasons or compassionate grounds or academic accommodation.

Please note: Students will be advised of their grades as *currently earned* one week prior to the FGS withdrawal deadline in all courses.

Course participants are expected to attend class and field trips. If class participants miss more than two consecutive classes without agreement of the Instructor and for reasons other than medical will be asked to meet with the Instructor and withdrawal from the course may be recommended depending upon the circumstances.

Written components of course exercises are subject to evaluation and are expected to be at the graduate level writing standard as per the University's E.2 Writing Across the Curriculum statement: <http://www.ucalgary.ca/pubs/calendar/current/e-2.html>);

Grading Scale

Final grades will be reported as letter grades, with the final grade calculated according to the 4-point range as illustrated in the following table. Course assignments will be evaluated by percentage grades with their letter grade equivalents as shown in the following table.

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	

PLEASE NOTE: 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.

Readings

There is no required textbook for the course. Materials related to the course lectures and exercises will be provided as required by the Instructor.

D2L

Please make sure that you use only your @ucalgary email address in order to receive messages related to course materials posted by the Instructor on the EVDL 639 D2L site.

Please Read the Following University of Calgary Information:

1. Written work, term assignments and other course related work may only be submitted by e-mail if prior permission to do so has been obtained from the course instructor. **Submissions must come from an official University of Calgary (ucalgary) email account.**
2. **Academic Accommodations.** Students who require 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 or the designated contact person in EVDS, Jennifer Taillefer (jtaillef@ucalgary.ca). Students who require an accommodation unrelated to their coursework or the requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Vice-Provost (Student Experience). For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/

3. **Plagiarism** - Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when:(a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work (this includes having another impersonate the student or otherwise substituting the work of another for one's own in an examination or test),(b) parts of the work are taken from another source without reference to the original author,(c) the whole work (e.g., an essay) is copied from another source, and/or,(d) a student submits or presents work in one course which has also been submitted in another course(although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. It is recognized that clause (d) does not prevent a graduate student incorporating work previously done by him or her in a thesis. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.
4. **Information regarding the Freedom of Information and Protection of Privacy Act** (<http://www.ucalgary.ca/secretariat/privacy>) and how this impacts the receipt and delivery of course material
5. **Emergency Evacuation/Assembly Points** (<http://www.ucalgary.ca/emergencyplan/assemblypoints>)
6. **Safewalk information** (<http://www.ucalgary.ca/security/safewalk>)
7. **Contact Info for: Student Union** (<https://www.su.ucalgary.ca/contact/>); Graduate Student representative(<http://www.ucalgary.ca/gsa/>) and Student Ombudsman's Office (<http://www.ucalgary.ca/ombuds/>).