

EVDS 626

Environmental Planning and Ecological Design

Dr. Cormack Gates (ccgates@nucleus.com)

Dr. Mary-Ellen Tyler (tyler@ucalgary.ca)

Office hours: by appointment only

EVDS 626 F(4-4Th)

Winter Term

Thurs 9:30am –

1:50pm

PF Rm 2165

Introduction

The inter-relationships among human land use activities and ecosystem structures, functions, and processes over time create the context for designing, planning and managing the spatial form of human-environment relationships at the landscape level.

The focus of this course is on understanding and demonstrating a 'CHANS' (coupled human and natural systems) approach to environmental planning and ecological design in the Calgary region. All MEDes Master and PhD students are welcome to participate.

This course utilizes a 'project' format and selected project sites for students undertake specific environmental planning and ecological design exercises and will involve field work and field trips.

Objectives

1. To understand landscape structure and function and landscape change in a social ecological systems context.
2. To develop and demonstrate an understanding of environmental planning and ecological design processes.
3. To understand the implications of scale, spatial form, and connectivity on ecosystem processes and human land use activities in the regional landscape and apply this understanding in a project and site context.

Teaching Approach

As a 'project' centered course, classes will focus on experiential learning in project context and not on Instructor delivery of lectures. Students are expected to actively participate in organizing the agenda for weekly activities related to project identification and completion.

8 hours of class time has been scheduled (Tuesdays and Thursdays 9:30-1:50) with Instructor input on Thursdays. Tuesday classes will provide time for student project work. The class room is available on Tuesdays for students to do course-related readings, work on course project work, do related field work, or use for project group meetings. Please note that 2 formal class field trips will be scheduled on Thursday and may require more than the scheduled 4 hours of class time and will be weather dependent. Field trip scheduling will be discussed and arranged with the class.

Instructors will provide topic-specific and thematic 'framing' lectures relative to the course's theoretical framework and student project development as required. However, the primary role of the Instructors will be to act as facilitators for student experiential learning in the context of term project goals and activities.

Content: Topic Areas

The general weekly schedule and format for the course is outlined below.

There are 5 general questions/themes that course content will address:

1. What are the ecological structures and functions of the regional landscape?
2. What is the CHANS concept and what are the critical social ecological interconnections in the Calgary regional landscape?
3. What is involved in an environmental planning process?
4. What is ecological design and how does it work?
5. How does spatial form and scale affect social and ecological structures and functions at the landscape level?

Week One

1. January 12/12:

- Course Overview
- Project group organization
- Student Seminar Paper Assignments
- Field Trip Planning

Week Two

2. January 19/12:

- Understanding regional landscape structure and function
- Land use and infrastructure
- Student Seminars (Assigned Papers)
- *Possible Field Trip #1 [If field trip, other contents moved to Jan. 26 class]

Week Three

3. January 26/12:

- *Possible Field Trip #1
- Student Seminars (Assigned Papers)

Week Four

4. February 2/12:

- **Project Exercise #1 (Landscape Structure and Function)**
- Structural and Functional integration of Social Ecological processes
- Student Seminars (Assigned Papers)

Week Five

5. February 9/12:

- Project Site Selection
- Student Seminars (Assigned Papers)
- * Possible Field Trip #2 [If field trip today other contents moved to Feb.16 class]

Week Six

6. February 16/12:

- * Possible Field Trip #2

Week Seven: EVDS BLOCK WEEK – NO CLASS**7. February 23/12:****Week Eight****8. March 1/12:**

- Instructor Tutorials Exercise #1
- **Project Exercise #2 (Environmental Planning)**

Week Nine**9. March 8/12:**

- **Group Presentations Exercise #1**
- Environmental Planning Process Overview

Week Ten**10. March 15/12:**

- Instructor Tutorials Exercise #2
- **Project Exercise #3 (Ecological Design)**

Week Eleven**11. March 22/12:**

- **Group Presentations Exercise #2**
- Ecological Design Process Overview

Week Twelve**12. March 29/12:**

- Instructor Tutorials Exercise #3

Week Thirteen**13. April 5/12:**

- Instructor Tutorials Exercise #3

Week Fourteen – LAST CLASS !**14. April 12/12:**

- **FINAL Group Presentations - Exercise #3**

Means of Evaluation

The 3 project group exercises will be the primary basis for course evaluation. In addition, individual seminars based on assigned papers will also be evaluated.

- Exercise 1 – SES Landscape Structure and Function (15 + 5 (presentation) = **20**)
- Exercise 2 – Environmental Planning Process (25 + 5 (presentation) = **30**)
- Exercise 3 – Ecological Design Process (30 + 5 (presentation) = **35**)
- Individual Seminar (Assigned Paper) = **15**

Total 100 points

***Please note: the 3 exercises and the Individual seminars must all receive a passing grade in order to pass the course.**

Due to the nature of the course there will be no final examination. All project requirements (3 Exercises and 1 student seminar) must be successfully completed (more than half the points available for each component as listed above) and completed by the deadlines assigned by the Instructors. Five points will be deducted for work that does not meet assigned deadlines.

Please Note: Due to the group project nature of course evaluation, all students registered in the course - by their registration - agree to fully participate in group work in an equitable manner. Should the instructors become aware that a student is not contributing equitably to group work they will be invited to a counseling session with the Instructors to correct the situation. Should there be no improvement following this session the student will be required to withdraw from the course. Similarly, if a student misses more than two consecutive classes without contacting the Instructors as to the reason for the absence they will be contacted by the Instructors and may be required to withdraw from the course. Therefore, if students registered in the course know they will be missing a class they are expected to contact and inform their project group and course Instructors. In case of illness or accident, students are expected to contact their Instructors as soon as possible regarding their situation so that accommodations can be arranged as required.

GRADING SCALE

Letter Grade	4-Point Scale	4-Point Range	Percent	Description
A+	4.00	4.00	92.5-100	Outstanding - evaluated by instructor
A	4.00	3.85-4.00	85-92.49	Excellent - superior performance showing comprehensive understanding of the subject matter
A-	3.70	3.50-3.84	80-84.99	Very good performance
B+	3.30	3.15-3.49	76-79.99	Good performance
B	3.00	2.85-3.14	73-75.99	Satisfactory performance
B-	2.70	2.50-2.84	70-72.99	Minimum pass for students in the Faculty of Graduate Studies
C+	2.30	2.15-2.49	66-69.99	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	63-65.99	
C-	1.70	1.50-1.84	60-62.99	
D+	1.30	1.15-1.49	56-59.99	
D	1.00	0.50-1.14	50-55.99	
F	0.00	0-0.49	0-49.99	

Note: A student who receives a B- or lower in two or more courses will be required to withdraw regardless of their grade point average unless the program recommends otherwise. Individual programs may require a higher minimum passing grade. A grade point value of 3.0 on the 4-Point Scale is the minimum acceptable average that a graduate student must maintain throughout the program as computed at the end of each registration anniversary year of the program. A student who receives a grade of F will normally be required to withdraw unless the program recommends otherwise.

Readings

Links to course readings in the University of Calgary library system consistent with current copyright regulations will be provided on the course blackboard site.

Notes**Please note the following course-related university policy, regulations and important 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.
2. It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. (<http://www.ucalgary.ca/drc/node/46>) Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.
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 (<http://www.su.ucalgary.ca/page/affordability-accessibility/su-structure/contact-info>); Graduate Student representative(<http://www.ucalgary.ca/gsa/>) and Student Ombudsman's Office (<http://www.su.ucalgary.ca/page/quality-education/academic-services/student-rights>).