



<b>Course Title: Environmental Planning and Ecological Design</b>			
Course Number	PLAN 600 – L01		
Pre/Co-Requisites	N/A		
Instructor Name	Mathis Natvik	mathis.natvik@ucalgary.ca	403-220-7958
Office Location	PF 3196		
TA Name	<b>TBA</b>	TA Email: <b>TBA</b>	
Class Dates	Fall 2020, Wednesdays		
Class Times	9:00 AM – 1:00 PM		
Class Location	Online		

### **Course Information / Description of the Course**

This course will provide students with an understanding of concepts in ecology and landscape ecology that are relevant to planning and landscape architecture at urban and regional scales. Classes, field trips, and assignments will explore six subject areas including: principles of landscape ecology; landforms and hydrology; ecosystems and habitats of the Calgary region; ecological land classification; impacts and social ecological systems; and application of landscape ecology for land use management decisions and special design. The assignments will assist in integrating course content in application to site specific and context specific environmental planning and ecological design issues found in planning and landscape architecture professional practice.

### **Learning Resources**

Required readings and learning materials will be posted for access on the D2L site for this course. For the purposes of accessing D2L, you must make sure you are registered in the course with your U of C email address.

## Course Learning Outcomes

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

1. Understand landscape ecology principles
2. Identify basic ecological processes
3. Identify habitat and ecosystem types that occur in southern Alberta
4. Understand the criteria used in ecological land classification
5. Understand impacts on ecological processes and social ecological systems
6. Apply ecological concepts and processes in planning and design problem-solving

## Assessment Components

Assessment Method	Description	Weight	Aligned Course Learning Outcome
Assignment #1	Landscape Ecology principles, landforms and hydrology	30	1 + 2
Assignment #2	Ecosystem and Ecological Land Classification criteria	40	3 + 4
Assignment #3	Applying Landscape Ecology in Planning and Landscape Architecture Practice	30	5 + 6

## Assessment and Evaluation Information

Attendance of all classes and field trips is expected and required unless there are medical or accommodation situations that arise. 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 me by phone, text, or 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 or advising the instructor of your situation you may be required to withdraw from the course.

Digital submission of assignments will be made via D2L or email, unless the instructor explicitly requested a hard copy or verbal presentation.

There will be no final exam. Participants will be evaluated on the basis of a series of course assignments as outlined in the course schedule. Written assignments are expected to be at the graduate level of written English consistent with the Faculty of Graduate Studies (FGS) guidelines available through the following link:

<http://www.ucalgary.ca/pubs/calendar/current/e-2.html>

Late assignments will not be accepted except on medical or compassionate grounds and unless there is a formal accommodation letter provided to the instructor at the beginning of the term. However, the instructor understands that sometimes, despite best intentions, plans and schedules don't work out. Therefore, course participants will be allowed one late assignment during the course. If you wish to exercise this option you must contact the instructor in advance to receive one extension, the period for which will be determined by your instructor based on your circumstances and will normally not be more than 1 to 3 days.

Course assignments are progressive – meaning each assignment is sequentially more complex and worth more. The grade assigned to each participant for the course will be based on the cumulative results of all assignments.

**Please note that FGS academic regulations state that a final course grade of “C+” or lower will result in required withdrawal from your degree program regardless of your overall grade point average (GPA) unless the program recommends otherwise. If the program permits a student to retake a failed course, the second grade will replace the initial grade in the calculation of your GPA, and both grades will appear on your official transcript.**

<b>Grading Scale</b>				
<b>Grade</b>	<b>Grade Point Value</b>	<b>4-Point Range</b>	<b>Percent</b>	<b>Description</b>
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.

<b>Topic Areas &amp; Detailed Class Schedule</b>		
*Please note: Due to unforeseen circumstances, it may be necessary to revise the schedule.		
<b>Date</b>	<b>Topic</b>	<b>Assignments</b>
Sept 9	– Introduction to Landscape Ecology	
Sept 16	– Landforms and Hydrology of Alberta	Assignment#1 issued
Sept 23	– Ecosystems of Alberta – Temporal & Spatial Components of Ecosystems	
Sept 30	<b>Field Trip #1 – various ecosystems in Calgary area</b>	
<b>October 5-9 – SAPL BLOCK WEEK – NO CLASSES</b>		
Oct 14	Social Ecological Systems & Impact Mitigation – Ecological Land Classification – Ecological Restoration – Industrial Reclamation	<b>Assignment#1 Due</b> Assignment#2 issued
Oct 21	Social Ecological Systems & Impact Mitigation – Stormwater Management – Wildlife Corridors	
Oct 28	Social Ecological Systems & Impact Mitigation – Wildfire Management in the Built Landscape	
Nov 4	<b>Field Trip #2 – Study site for Assignment #3 (TBA)</b>	<b>Assignment#2 Due</b> Assignment#3 issued
<b>Nov 9-13 – READING WEEK – NO CLASSES</b>		
Nov 18	Social Ecological Systems & Impact Mitigation – Urban Forestry – Living Architecture (Green Roofs & Green Walls)	
Nov 25	Landscape Ecology – Application in Problem Solving	
Dec 2	Landscape Ecology – Application in Problem Solving	
Dec 9	<b>Assignment#3 due – final group presentations</b>	

## Media and Recording in Learning Environments

### Part 1

University Calendar: <https://www.ucalgary.ca/pubs/calendar/current/e-6.html>

Recording of lectures (other than audio recordings that are pre-arranged as part of an authorized accommodation) is not permitted.

Students may not record any portion of a lecture, class discussion or course-related learning activity without the prior and explicit written permission of the course instructor or authorization from Student Accessibility Services. For any other use, whether by duplication, transcription, publication, sale or transfer of recordings, written approval must be obtained from the instructor for the specific use proposed. Any use other than that described above constitutes academic misconduct and may result in suspension or expulsion.

### Part 2

The instructor may use media recordings to capture the delivery of a lecture.

The instructor will notify all students and guests in the class that the event is being recorded. If a student or guest wants to take steps to protect privacy, and does not want to be recorded, the instructor will provide the individual (s) with an alternative means of participating and asking questions (e.g., passing written notes with questions). Students cannot be penalized for choosing not to be recorded in situations where participation is part of the course. Students must be offered other ways of earning participation credit that do not involve recording.

Any video-recording would be intended to only capture the instructor and the front of the classroom. Students/other participants would not necessarily be visible on video recordings.

## University of Calgary Policies and Supports

### ACADEMIC ACCOMMODATION

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; 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/](http://www.ucalgary.ca/access/). Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor.

The full policy on Student Accommodations is available at

<http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

### ACADEMIC MISCONDUCT

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, (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. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>

**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](http://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.

**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.

**UNIVERSITY STUDENT APPEALS OFFICE:** If a student has a concern about the course, academic matter, or a grade that they have been assigned, they must first communicate this concern with the instructor. If the concern cannot be resolved with the instructor, the student can proceed with an academic appeal, which normally begins with the Faculty.

<https://ucalgary.ca/student-appeals/>

**More student support and resources (e.g. safety and wellness) can be found here:**

<https://www.ucalgary.ca/registrar/registration/course-outlines>