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## Fall 2023

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<b>Course Number</b>	LAND 612	<b>Classroom</b>	TBD
<b>Course Name</b>	Site Technology II: Construction and Materials		
<b>Pre/Co-Requisites</b>			
<b>Instructor</b>	George Harris	<b>Office Hours/Location</b>	by appointment
	<b>Email: George.harris@ucalgary.ca</b>		<b>Phone: 403.369.0064</b>
<b>Class Dates</b>	Friday 8:50 am to 12:50 pm		
<b>Instructor Email Policy</b>	Please note that all course communications must occur through George.harris@ucalgary.ca, and I will respond to emails sent via student's @ucalgary emails within 48 hours.		
<b>Name and Email of Teaching Assistant(s)</b>	TBD		

### Course Description:

This course offers a comprehensive introduction to landscape feature and structure design and construction. We'll explore various construction methods and materials, both traditional and contemporary, including earth, stone, concrete, wood, metal, and other elements like brick, glass, and polymers, with a strong focus on sustainability. Historical and contemporary case studies will be integrated to provide a broader context.

The course will teach you practical skills, including creating and labeling construction drawings specific to identified materials. Standard construction specifications (General, Products, Execution) will be a cornerstone of learning. Guest lectures by specialists and field observations will offer real-world insights. An assignment will involve documenting landscape as-built work. Potential field trips will bridge theory and practice. Join us to master harmonizing design and construction creatively and sustainably in landscape architecture.

### Teaching Approach

The course will consist of a series of inter-related lectures, reading assignments, site visits, and assignments. Students will participate in class discussions and research, as well as problem solving assignments. Some in-class work may occur under the supervision of guest lecturers and the instructors will give the students hands on experience with contract document preparation.

Guest lecturers and or site visits will present information on a number of specialized topics.

### **Content**

There will be two parts to this course.

In Part 1 students will learn about contract documents, with an emphasis on specifications for construction. This information will be carried through the remaining lectures.

Part 2 of the course will be organized around lectures on four key building materials.

1. Stone
2. Wood
3. Concrete
4. Metal

The information covered about each material will include technical aspects of the material and how the material is used, the contemporary use of the material, source of the material, and local sources.

**Course Hours:** (2-2) 3 unit course

### **Online Delivery**

This course will take place **in person** at the University, with some site visits. Some lectures may be offered online if the instructor cannot make an in person class, in which case the course will be available via Desire2Learn (D2L) and Zoom. Students are required to participate in the asynchronous learning tasks using the D2L learning environment and synchronous Zoom sessions. If unable to participate live due to unforeseen circumstances, inform the instructor in advance to work out an alternative participation activity (e.g., review the available presentation slides recordings and actively contribute to the follow-up online discussion).

### **Course Learning Outcomes:**

These core competencies will form the foundation of the course, allowing students to develop a comprehensive understanding of landscape materials and their applications in real-world projects. The course objectives focus on enabling students to make informed material choices, execute them in construction, and apply sustainability principles to their landscape architecture designs.

**Core Competency 1: Material Selection and Evaluation** Objective: Students will develop the ability to assess and select appropriate landscape materials based on their unique qualities, performance characteristics, and aesthetic attributes to meet specific design requirements.

**Core Competency 2: Construction and Detailing Techniques** Objective: Students will acquire the knowledge and skills to execute landscape materials effectively in construction by understanding construction techniques, connections, and detailing for each material.

**Core Competency 3: Sustainability in Material Use** Objective: Students will gain an understanding of sustainable practices in landscape architecture and apply eco-friendly material choices and construction methods to create environmentally responsible designs.

**Core Competency 4: Landscape Material Specifications** Objective: Students will develop the ability to create accurate and relevant landscape material specifications that articulate the requirements, standards, and quality of materials to ensure successful implementation in landscape architecture projects.

#### **Learning Resources:**

The following books and resources are recommended but not required.

Hopper, Leonard J., 2007. *Landscape Architectural Graphic Standards, Student Edition*. Hoboken, NJ. Wiley.

Holden, Robert, and Jamie Liversedge. 2011. *Construction for Landscape Architecture*. London, UK: Laurence King Publishing.

City of Calgary Development Guidelines and Specifications for Landscape Construction; [Park development guidelines \(calgary.ca\)](http://parkdevelopmentguidelines(calgary.ca))

#### **Technology and Material requirements (D2L etc.):**

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- 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

- Most current laptops will have a built-in webcam, speaker and microphone

For in-class assignments students are required to have the following tools:

Graph paper  
 Pencil or felt pen (eraser if applicable)  
 Ruler

**Additional Classroom Conduct and Related Information**

**Guidelines for Zoom Sessions in Online Classes**

Students are expected to participate actively in all Zoom sessions and to turn on their webcam. Please join our class in a quiet space that will allow you to be fully present and engaged in the Zoom sessions. Students must behave in a professional manner during the session. Students, employees, and academic staff are also expected to demonstrate behaviour in class that promotes and maintains a positive and productive learning environment.

**Assessment Components:**

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Assessment Method	Description	Weight	Aligned Course Learning Outcome
Exam #1	Specifications	20%	1 - 4
Assignment #2 (Part A)	Photo Journal (Part A) – Stone and Wood	15%	1 - 4
Assignment #2 (Part B)	Photo Journal (Part B) – Concrete and Metal	15%	1 - 4
Assignment #3	Material Details (Part A) 1. Details for a variety of features a. Stone b. Wood	25%	1 - 4
Assignment #3	Material Details (Part B) 1. Details for a variety of features a. Concrete b. Metal	25%	1 - 4
Assessment and Evaluation Information			
Attendance and Participation Expectations: Students are expected to attend all lectures as no recordings or lecture notes will be provided. There will be in class assignments and one in class exam (Exam#1).			

**Guidelines for Submitting Assignments:**

All assignments to be submitted on D2L.

**Final Examinations:**

There will be no final examination. Assessment will be done based on the quality of work submitted.

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

**Late Assignments:**

Assignments submitted late will be penalized at then equivalent of 5% per day (at the discretion of the Instructor).

**Criteria that must be met to pass:**

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.

**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/f-1-3.html>

### Topic Areas & Detailed Class Schedule

Class Number	Day of the Week	Date	Topic	Guest/Site Visit
1A	Friday	September 8, 2023	Class Intro	
1B			Sustainability of Materials	TBD
2A	Friday	September 15, 2023	Introduction to Contract Documents/Contract Packages	
2B			Introduction to Specifications/CLS Review, Master Format Review,	
3A	Friday	September 22, 2023	More specs	
3B			In Class Exam	
4A	Friday	September 29, 2023	Stone - Materials / Execution / Detailing	
4B			Stone - Materials / Execution / Detailing	
	Friday	October 6, 2023	Block Week - No Classes	
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5A	Friday	October 13, 2023	Stone - Contemporary Usage: Guest Lecturer /Site Visit	TBD
5B				
6A	Friday	October 20, 2023	Wood - Materials / Execution / Detailing	
6B			Wood - Materials / Execution / Detailing	
7A	Friday	October 27, 2023	Wood - Contemporary Usage: Guest Lecturer /Site Visit	TBD
7B				
8A	Friday	November 3, 2023	Concrete - Materials / Execution / Detailing	

8B			Concrete - Materials / Execution / Detailing	
		November 5, 2023	Assignment #2 Part A Due	
	Friday	November 10, 2023	Holiday - No Classes	
		November 16, 2023	Assignment #3 Part A Due	
9A	Friday	November 17, 2023	Concrete - Contemporary Usage: Guest Lecture /Site Visit	TBD
9B				
10A	Friday	November 24, 2023	Metal - Materials / Execution / Detailing	
10B			Metal - Materials / Execution / Detailing	
11A	Friday	December 1, 2023	Metal - Contemporary Usage: Guest Lecture /Site Visit	TBD
11B				
		December 8th, 2022	Assignment #2 Part B Due, Assignment #3 Part B Due	

### Special Budgetary Requirements

Four classes will be held at various locations within the City of Calgary. Student will have to find their own means of transportation to these locations.

### University of Calgary Policies and Supports

#### 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/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf>. 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/](http://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://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-policy>

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 (<https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy>) 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 AND GENDER-BASED 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/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy> .

#### **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