UNIVERSITY OF CALGARY
SCHOOL OF ARCHITECTURE, PLANNING AND LANDSCAPE

Course Number: DSGN 231

Course Name: Introduction to Urban Infrastructures and Systems

Classroom: ██████

Instructor: Prof. Alberto de Salvatierra

- Email: alberto.desalvatierr@ucalgary.ca
- Office Hours and Location: Student meetings outside class time are by appointment only.
- Instructor Email Policy: Instructors will respond to emails sent via students' @ucalgary emails as soon as possible, usually within 48 hours (excluding weekends).

Teaching Assistant: Chris Lin (MArch '24)

- Email: chris.lin1@ucalgary.ca

Class Dates: Mandatory In-Person Mondays and Wednesdays, Fall 2023, 10:30 to 11:45am

Course Description:

This course is designed as a broad survey and foundational introduction to topics related to urban infrastructures and systems. Organized in two halves—Paradigms and Practices (Phase I) and Prospects (Phase II), this course explores features of the built environment through the lens of academics and practitioners working at the intersection of architecture, planning and landscape architecture. In Phase I (September 6 to October 23), lectures will explore the various types of work designers can do: ethnography, transportation planning and urban policy, neighbourhood and small-town planning, ecological activism, community design, critical conservation, landscape urbanism, urban planning and design, environmental planning, architecture, and scenario planning. In Phase II (October 25 to December 6), lectures will explore various transdisciplinary topics and themes that present new frontiers in design: geospatial data and visualization, ecology, botany, civilization, technology and security, health and wellness, networks, urbanization, energy and decarbonization, and political theory.

This course (focused on planning) is part of the technical stream of BDCI courses and is a prerequisite to *DSGN 331: Introduction to Landscape Ecology* (focused on landscape architecture), itself a prerequisite to *DSGN 431: Introduction to Building Science* (focused on architecture).

Academic Calendar description: https://www.ucalgary.ca/pubs/calendar/current/design.html#48342

Course Hours: 3 units; (3-0)

Requisites: See [Section 3.3.5](#) of the Academic Calendar for more information regarding School of Architecture, Planning and Landscape courses.

- Prerequisite(s): Admission to the Bachelor of Design in City Innovation program.

Course Delivery:

- In-person Delivery

Course Learning Outcomes:

Upon completion of this course, students will be able to understand a wide array of design approaches to the built environment and their implications in the context of urban infrastructures and systems. Emphasis will be placed on the value of engaged scholarship and critical inquiry as a means for epistemological exploration.

Course learning outcomes include:

1. Develop the means, methods and mindset to critically consider, compare and evaluate urban infrastructures and systems in cities.
2. Develop knowledge and skills concerning the planning, design and development of urban space and form.
3. Develop the ability to be able to research, assess, interpret, and advance dimensions of urban design of cities.
4. Develop a transdisciplinary understanding of the connective tissue between aspects of the built environment and the ways in which designers contribute to this system.
5. Develop world and self-views concerning urban planning and design and its potential influence and impact upon cities, society and civilization.

Learning Resources:

- Technology requirements:
  - 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.
- [Student IT Resources](#)

- To accomplish course work for DSGN 231 students require access to *Cities: Skylines*, in addition to Microsoft suite (Word and Excel), and Adobe PDF.

Special Budgetary Requirements:

- This course will require the use of a dedicated notebook. The size, color, or cost is immaterial and up to the discretion of the student.

- Students will need a copy of *Cities: Skylines*, provided free to participants of BDCI: Launchpad's City Game-A-Thon. A very limited number of licences are available to students who still need to acquire the game.

Classroom Conduct and Related Information:

The BDCI Studio and other SAPL/University-provided facilities and equipment are governed by the [University's Student Non-Academic Misconduct Policy](#). Professional and courteous behavior is expected at all times. For more information, please refer to [Appendix 1: Prohibited Conduct](#), including the following categories: 1. Protection of Individuals; 2. Protection of Property; 3. Protection of University Functions, Activities and Services; 4. False Information and Identification; 5. Possession or Use of Dangerous Objects, Drugs or Alcohol; 6. Aiding in the Commission of an Offence; 7. Contravention of Other Laws and University Policies; and 8. Failure to Comply with a Sanction.

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Assessment Components:

The University policy on grading and related matters is described in F.1 and F.2 of the Academic Calendar. In determining the overall grade in the course the following weights will be used:

Assessment Method	Description	Weight	Aligned Course Learning Outcome*
Project 1	Design Journal	40%	1, 2, 3, 4, 5
Project 2	*Cities: Skylines* Project, Part A	30%	1, 2, 3, 4, 5
Project 3	*Cities: Skylines* Project, Part B	30%	1, 2, 3, 4, 5

Please refer to itemized Aligned Course Outcomes.

- Assessment and Evaluation Information:
  - Submitted course materials are evaluated on a stated balance of factors specific to each project submission and clarified by the accompanying grading rubric.
  - Included factors encompass:
    - Submission deadline met
    - Competent use of toolsets
    - Completion of described project challenges
    - Depth of engagement/experimentation with project methodologies
    - Quality, clarity, and precision of visual communication
- Attendance and Participation Expectations:
  - Students are expected to attend and come prepared to meaningfully engage in all class sessions. This includes producing or preparing content necessary for discussion and contributing to individual and class-wide discussions and/or conversations/assessments with the Course Instructors.
- Excused Absences

  - In the event of an exceptional circumstance (e.g., illness, bereavement, etc.) or an exceptional opportunity (e.g., varsity athletic competition, national conference or awards ceremony, pow wow, etc.) up to four excused absences (for courses that meet twice or more per week) and up to two excused absences (for courses that meet once per week) are allowable per semester before jeopardizing one's own course grade and ability to pass the course. However, any such accommodations must be approved by the Instructors with advance notice by the student.

- Unexcused Absences

  - Attendance at all class sessions and participation in all assessments is mandatory. Unexcused absences in excess of two per semester (for courses that meet twice per week) and one per semester (for courses that meet once per week) are grounds for failure in the course.

- Total Number of Absences

  - The combined total number of excused or unexcused absences per semester cannot exceed four per semester (for courses that meet twice per week) or two per semester (for courses that meet once per week). Any number in excess are grounds for failure in the course.

- Guidelines for Submitting Assignments:
  - All assignments must be submitted digitally, to the appropriate course D2L section, by the specified due date/time. In some cases, hard copies may be required to also be submitted in accordance with project briefs.

- Final Examinations:
  - No final examination required
- Expectations for Writing:
  - https://www.ucalgary.ca/pubs/calendar/current/e-2.html
- Late Assignments:
  - All assignments (e.g., projects, papers, presentations, etc.) must be turned in on time. Late assignments will lose a letter grade every 24 hours after the submission date/time. Late assignments submitted more than four days late constitute automatic failure. Late assignments with a valid excuse, as defined by the University's guidelines (Section G.2.3) or with advance prior notification to the instructors, may be considered without penalty upon review of the student's attendance and participation record.

  - Please let your instructor know immediately if you cannot meet the deadlines specified. You may be required to provide supporting documentation, as per Section M.1 of the Academic Calendar to support your request.
- Criteria that must be met to pass:

  - A passing grade calculated from the cumulative value of all submitted assignments. A submission for each of Projects 1-3 is required for the completion of the course.

Flexible Grade Option (CG Grade):

As per Section 3.5.1 of the Academic Calendar, the School of Architecture, Planning and Landscape will not permit the Flexible Grade Option (CG Grade) for any course offered by the School.

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	
C+	2.30	2.15-2.49	65-69.99	
C	2.00	1.85-2.14	60-64.99	
C-	1.70	1.50-1.84	55-59.99	Minimum grade requirement for prerequisite courses.
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	

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Topic Areas and Detailed Class Schedule:

The following class schedule is subject to change according to the requirements, eventualities, and progress of the course. Instructors will update the class over the term as any changes are required.

DSGN 231: Introduction to Urban Infrastructure and Systems
FALL 2023
University of Calgary, School of Architecture, Planning and Landscape

Week	Dates	Month	Day		Topics	Lecturer	Part
1	4-8	September	Mon	4	*Labour Day: No Class*		
			Wed	6	*Design in City Innovation*	**Class-Wide Discussion**	
2	11-15		Mon	11	*Cities*	**Class-Wide Discussion**	
			Wed	13	Ethnography	SAPL_Alberto de Salvatierra	
3	18-22		Mon	18	Transportation Planning + Urban Policy	SAPL_Robb Whyte	
			Wed	20	Neighborhood + Small Town Planning	SAPL_Bev Sandalack	
4	25-29		Mon	25	Ecological Activism	**EXTERNAL_Nocturnal Medicine**	PHASE I: PARADIGMS + PRACTICES
			Wed	27	Community Design	*The Human Scale* (movie)	
5	2-6	October	Mon	2	Critical Conservation	**EXTERNAL_Natalia Escobar Castrillon**	
			Wed	4	Landscape Urbanism	**EXTERNAL_Fabian Tron**	
6	9-13		Mon	9	*Thanksgiving Day: No Class*		
			Wed	11	Urban Planning + Design	SAPL_Francisco Analiz Uribe	
7	16-20		Mon	16	Environmental Planning	SAPL_Mary-Ellen Tyler	
			Wed	18	Architecture	**EXTERNAL_ZGF Architects**	
8	23-27		Mon	23	Scenario Planning	SAPL_Youjung Kim	
			Wed	25	*What is the future of cities?*	**Class-Wide Discussion**	
9	30-3		Mon	30	Geospatial Data and Visualization	EXTERNAL_Samantha Solano	
		November	Wed	1	Ecology	SAPL_Tawab Hlimi	
10	6-10		Mon	6	Botany	**EXTERNAL_Christianna Bennett**	
			Wed	8	Civilization	SAPL_Alberto de Salvatierra	
11	13-17		**Mon**	**13**	*Midterm Break: No Class*		PHASE II: PROSPECTS
			Wed	**15**	*Midterm Break: No Class*		
12	20-24		Mon	20	Technology + Security	SAPL_Thomas P. Keenan	
			Wed	22	Health + Wellness	**EXTERNAL_Jerry Hacker**	
13	27-1		Mon	27	Networks	**EXTERNAL_Clare Lyster**	
			Wed	29	Urbanization	**EXTERNAL_Nikos Katsikis**	
14	4-8	December	Mon	4	Energy + Decarbonization	SAPL_Douglas Robb	
			Wed	6	Political Theory	**EXTERNAL_Hilton Simmet**	

Deadlines:

Project I: Design Journal will be collected at the end of each week on Friday, to be returned to the student on the Monday of the following week. Project I is therefore cumulative across the semester.

Project II: Cities: Skylines Project, Part A is due at the start of class time on Wednesday, October 25th.

Project III: Cities: Skylines Project, Part B is due at 11:59pm on Friday, December 8th.

Scheduled Out-of-Class Activities:

There are no scheduled out-of-class activities for this course.

UNIVERSITY OF CALGARY COVID-19 UPDATES AND PROCEDURES

https://www.ucalgary.ca/risk/emergency-management/covid-19-response/covidsafe-campus

ACADEMIC ACCOMMODATION

https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations

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).

Student Accessibility Services 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 Procedures please visit:
- Student Academic Misconduct Policy: https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-policy
- Student Academic Misconduct Procedure: https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure

Additional information is available on the Academic Integrity Website at https://www.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 and Gender-Based Violence Policy guides us in how we respond to incidents of sexual and/or gender-based violence, including supports available to those who have experienced or witnessed sexual/gender-based violence, or those who are alleged to have committed sexual/gender-based 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.

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