UNIVERSITY OF CALGARY
SCHOOL OF ARCHITECTURE,
PLANNING AND LANDSCAPE

Fall 2025

The McDougall Creek Fire, Kelowna, BC, August 15, 2023 – September 21, 2023. 13,500ha burned.
Robb, D. & Jacobs, S. (2025). Smoke Screens. *Journal of Landscape Architecture, Fall*, 110-123.

Land Acknowledgement

Course Number: DSGN 303

Course Name: Transscalar Design Studio I – Large ("The Fire Studio")

Classroom: [redacted]

Instructor: Dr. Douglas Robb

- Email: douglas.robb@ucalgary.ca
- Office Hours and Location: By appointment
- Instructor Email Policy: Please note that all course communications must occur through your @ucalgary email. I will respond to emails within 48hrs, excluding weekends and holidays.

Class Dates: In-person, Tuesdays and Fridays, Sept 2 – Dec 5, 1:00PM to 4:50PM

Course Description:

- Academic Calendar description: https://calendar.ucalgary.ca/courses/1660561
- Course hours: 6 units

Studio Overview

Wildfire is fast becoming one of the defining environmental issues of our time. In the summer of 2023 alone, Canada experienced its worst wildfire season in recorded history, with over 18 million hectares of land burned—more than six times the national average. These **megafires** produced such immense volumes of carbon that only India, China, and the United States released more carbon equivalent emissions globally that year. For many Canadians, fire has become a routine experience of our changing climate. But it is also much more than that: fire is a complex ecological force, a management problem, a political flashpoint, and increasingly, terrain for design.

This edition of DSGN 303 – Large (a.k.a. "The Fire Studio") explores wildfire as a large-scale design challenge situated at the intersection of climate adaptation, landscape ecology, and environmental justice. Based in the nearby Bow Valley, our studio focuses on the Banff townsite and surrounding areas of Banff National Park: lands where fire is not only probable, but inevitable. While Banff remains a beloved international symbol of Canadian wilderness and ecological beauty, it is also one of the most fire-prone inhabited landscapes in the country. And like many iconic landscapes in the Canadian West, it is facing mounting tensions between urban development, tourism, conservation, and the realities of living with fire.

This studio emerges from a simple but urgent question: how can we design to coexist with fire? Designers are increasingly called to reckon with fire as an essential feature of montane ecosystems. In Banff, as in many parts of the Canadian Rockies, historical **fire suppression** policies, colonial forest management practices, and changing **fire regimes** have increased the **fuel load** in the landscape, leading to a dangerous accumulation of **combustible biomass**. At the same time, climate change has introduced warmer and drier conditions, extending fire seasons and increasing the frequency of lightning ignitions. As Parks Canada now acknowledges, fire exclusion is no longer a viable strategy. **Prescribed burns**, **fuel breaks**, **fire-adapted infrastructure**, and other forms of proactive design are critical tools for protecting lives and homes, and for supporting the health of forest ecosystems.

Yet managing wildfire is more than a technical challenge; it is also a social, cultural, and spatial one. For many years, the Canadian public has been conditioned to view fire as a destructive force to be suppressed at all costs. This narrative has deep colonial roots, erasing millennia of Indigenous fire stewardship and obscuring the ecological benefits of **low-intensity fire** on forest regeneration, biodiversity, and soil health. Recent efforts to reintroduce **cultural burning** practices (led by Indigenous communities and increasingly supported by Parks Canada and provincial agencies) are slowly reframing

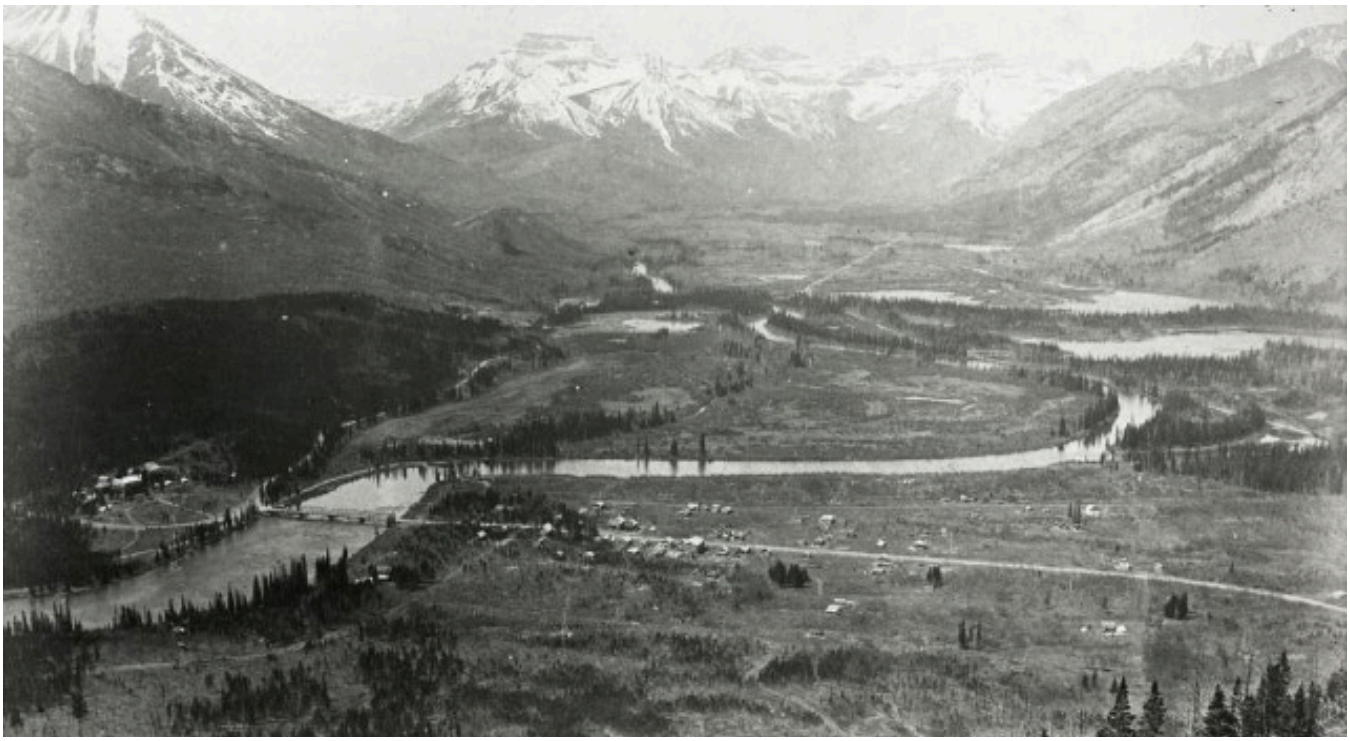
fire not as a threat, but as a partner in landscape care. This studio will attend to these shifting epistemologies by asking how design might help bridge cultural knowledge systems and forge new environments and cultures of wildfire coexistence.

Over the semester, we will examine wildfire from multiple scales and disciplinary perspectives. We will begin by investigating fire as a dynamic ecological process and **climate feedback** mechanism, with readings and discussions introducing students to the fire ecology of the Canadian Rockies. Through case studies and field trips, we will learn about current wildfire management practices in Alberta and beyond, including **forest thinning**, **FireSmart™** design and planning, and **post-fire restoration**. We will also engage with creative practices and visual media that shape public understandings of fire: what kinds of images circulate in the aftermath of fire, and how might design offer more grounded and place-based representations of fire-affected landscapes?

Central to the studio will be a design project focused on a specific site in or near Banff. This site may include **wildland–urban interface (UWI)** zones, recreation areas, trail networks, or community infrastructure currently at risk from wildfire. Students will be asked to analyze the ecological and cultural conditions of their site and develop spatial design strategies that respond to fire risk in adaptive, inventive, and ecologically attuned ways. We will explore a range of possible interventions, from landscape-scale **fuel mosaics** and **buffer zones** to fire-adapted trails, public spaces, and interpretive installations that communicate risk and resilience. Importantly, students will be encouraged to think both defensively and creatively: what does it mean to design not only for protection, but for regeneration, education, and cohabitation?

Throughout the studio, we will return to the politics of representation. In the aftermath of recent Canadian megafires, media images have played an outsized role in shaping how fire is understood by the public. As noted in recent research, these images tend to flatten fire into spectacle, prioritizing visual drama over ecological context. Aerial views of **smoke plumes**, glowing skylines, and burning homes dominate our collective visual memory of fire, often detaching these events from the structural forces (e.g., climate change, colonial policy, **industrial forestry**) that enable them. As designers, we must cultivate more situated and critical modes of seeing. In this spirit, students will be encouraged to document and communicate their projects through a variety of media, including mapping, drawing, modeling, and collage. These representational tools are not neutral; they shape how we imagine fire, and how we act upon the landscape.

In the face of growing climate uncertainty, the need for fire-literate designers has never been greater. The Fire Studio does not aim to eliminate fire—such a goal is neither possible nor desirable—but rather to cultivate a nuanced understanding of fire's ecological role, cultural significance, and spatial dynamics. By designing for fire-adapted futures in Banff and beyond, this studio will equip students with the tools, strategies, and critical awareness necessary to engage with one of the most pressing landscape challenges of the 21st century.



Banff townsite, circa 1900. Note the low density of tree cover.
Parks Canada, https://parks.canada.ca/pn-np/ab/banff/nature/conservation/feu-fire/restoration

Banff townsite, 2025. Note the increased density of tree cover.
Parks Canada, https://parks.canada.ca/pn-np/ab/banff/nature/conservation/feu-fire/restoration

The Site: Banff

Banff National Park, Canada's oldest national park and a UNESCO World Heritage Site, is located in the Front Ranges of Alberta's Rocky Mountains, roughly 130km west of Calgary. Encompassing over 6,600km^2 of mountainous terrain, Banff is globally renowned for its dramatic alpine scenery, glacial lakes, and dense coniferous forests. At the heart of the park lies the Banff townsite, a compact community nestled in the Bow River Valley with a permanent population of approximately 9,500. The town functions as both a tourism hub and a site of intense ecological and infrastructural management. It is surrounded on all sides by wilderness, forming a classic example of what fire professionals term the **wildland–urban interface**, or a zone where human development abuts fire-prone ecosystems.

Prior to European settlement, the landscapes of Banff were shaped by both lightning- and human-ignited fires. Indigenous Peoples, including those with historic and ongoing ties to the land such as the Stoney Nakoda, Blackfoot, and Tsuut'ina Nations, used fire to maintain travel corridors, regenerate culturally important plant species, and manage game habitat. These practices contributed to a dynamic mosaic of meadows, open-canopied woodlands, and grasslands across the valley bottoms. However, with the establishment of the national park in 1885, fire has been systematically excluded. **Cultural burning** was prohibited, and aggressive **fire suppression** became the dominant land management paradigm for nearly a century. As a result, forests in the Bow Valley have become denser, more ecologically homogeneous, and more flammable; conditions that now intersect with the accelerating impacts of climate change.

The contemporary **fire regime** in Banff is shaped by this legacy of suppression, as well as by a changing climate that brings hotter, drier summers and increased lightning strikes. Recent years have seen the worst wildfire seasons in recorded Canadian history, and iconic landscapes are not immune—39,000ha of Jasper National Park, including roughly half of the Jasper townsite, burned in the 2024 fire season. Wildfire risk in Banff is now categorized at the highest national level, with the potential for severe consequences to public safety, infrastructure, and ecological integrity. Accordingly, Parks Canada has recognized that returning fire to the landscape under carefully controlled conditions is essential for restoring ecosystem health and protecting communities. Since the 1980s, the agency has shifted toward a model of "fire management" rather than fire suppression, reintroducing fire to the park through both **prescribed burns** and managed wildfires.

The *2020 Fire Management Plan for Banff, Yoho, and Kootenay National Parks* articulates a strategic vision for using fire as a tool for both ecological restoration and wildfire risk reduction. Banff's fire management strategy is informed by zoning protocols that distinguish between intensive, intermediate, and extensive **fire management zones** based on proximity to human infrastructure, fuel conditions, and ecological values. Around the town of Banff, which falls into the intensive management zone, Parks Canada has implemented a suite of fuel reduction projects, including **forest thinning**, **mechanical removal** of dense undergrowth, and the creation of landscape-scale **fuel breaks**. These interventions are designed to reduce the intensity and speed of potential fires and to increase the safety and effectiveness of firefighting operations.

Despite these advances, many challenges remain. Prescribed burning is limited by short **weather windows**, sensitive ecological values, and social acceptance towards fire. Public perceptions of fire risk is uneven, and the economic imperatives of tourism sometimes clash with the visibility of smoke, disruption of access, and the aesthetic changes fire introduces to the landscape. Meanwhile, Indigenous cultural burning practices are only beginning to be restored after over a century of suppression. Parks Canada has stated its commitment to working with Indigenous Nations to support their involvement in fire stewardship, but this is an ongoing process.

The Fire Studio takes the Banff townsite and its immediate surroundings as both a subject of study and a site for design intervention. As students engage with this complex site, they will be asked to develop strategies that respond to wildfire risk while contributing to ecological restoration, cultural recognition, and public education. This work might include, but is not limited to:

- Designing *fire-adapted public spaces* that integrate defensible zones with habitat connectivity;
- Proposing *interpretive installations* that visualize fire histories and Indigenous fire knowledge;
- Developing *vegetation mosaics* and *planting plans* that break up fuel continuity and create spatial and ecological diversity within the WUI;
- Speculating on *post-fire landscape restoration and architectural typologies* that blend ecological, cultural, **FireSmart**, and aesthetic objectives;
- Rethinking *urban edges* through the lens of fuel reduction, fire ecology, and community.

Students are encouraged to work across large scales and systems, connecting the material realities of vegetation and fire behaviour with the cultural and economic context of Banff as a global tourism destination on Treaty 7 territory. Through in-depth research, site analysis, iterative design, and critical representation, students will explore how design can help us co-exist with fire in a warming world.

The Trip

A one-day studio trip to Banff National Park will be scheduled in early October 2025 (exact date TBD). This field trip will offer students the opportunity to engage directly with the landscape and stakeholders shaping fire management in and around the Banff townsite.

We will meet with Parks Canada staff and local community members to learn about ongoing wildfire risk reduction efforts, prescribed burn projects, and ecological restoration initiatives. The day will also include on-the-ground site analysis and fieldwork in selected fire management areas surrounding Banff, with an emphasis on the wildland–urban interface. Travel will be arranged via carpool from Calgary. Further logistical details, including carpool coordination, departure times, and site visit locations, will be confirmed closer to the travel date.

Weather in the mountains at this time of year is highly variable and can include everything from warm sunshine to cold rain or early-season snow. We will travel rain or shine (or snow!). Students must come prepared with appropriate footwear, warm and waterproof clothing, and gear for conducting fieldwork in inclement conditions. Expect dramatic views, active engagement with Parks staff, and a full day outdoors in the landscape.

Requisites: See Section 3.3.5 of the Academic Calendar for more information regarding SAPL courses.

- Prerequisite(s): DSGN 203 Design Thinking and the City Studio
- Corequisite(s): DSGN 311 Geometry and Simulation

Course Delivery:

- This course will be delivered in-person.

Course Learning Outcomes:

Upon completion of this course, students will know and be able to:

1. *Demonstrate knowledge of wildfire ecology and fire-adapted landscapes:* Students will be able to explain key ecological principles related to fire regimes, fuel dynamics, and landscape resilience, with specific reference to the Canadian Mountain West.
2. *Critically analyze wildfire management practices across multiple knowledge systems*: Students will engage with contemporary fire management strategies, including prescribed burning, FireSmart planning, and Indigenous cultural burning, evaluating their ecological, cultural, and political implications.
3. *Apply landscape analysis methods to assess natural hazards and ecological conditions at large scales*: Students will conduct multi-scalar site analyses of Banff's wildland-urban interface, synthesizing spatial, ecological, and social data to inform design decisions.
4. *Develop speculative, yet grounded design interventions that respond to evolving climate conditions:* Students will propose site-specific, landscape-scale projects that incorporate strategies for fire adaptation, climate resilience, and landscape literacy.
5. *Communicate complex landscape systems through visual, verbal, and written media*: Students will refine their skills in visual representation, site analysis, and verbal presentation to convey dynamic fire-related processes and communicate large-scale design ideas to diverse audiences.

Learning Resources:

- Active Wildfires in Canada GIS Resource Page (ESRI)
- Alberta Wildfire (Government of Alberta)
- Anderson, Drew and Simmons, Matt. "Why are Canada's Parks so Primed to Burn?" *The Narwhal,* 2024, August 2.
- Banff National Park Fire Management (NRCan)
- Bénichou, Noureddine, *et al.* National Guide for Wildland-Urban Interface Fires*. National Research Council of Canada*, 2021.
- Canada Interagency Forest Fire Centre (CIFFC)
- Canadian Forest Service (CFS) Fire Information (NRCan)
- Canadian Wildland Fire Information System (NRCan)
- Centre for Wildfire Coexistence (UBC)
- Cultural Burning & Prescribed Fire
- Get FireSmart Podcast (FireSmart™)
- Incandescence (National Film Board of Canada)
- Kaufmann, Bill. "It Could All Go Up in Flames." *Calgary Herald* (2025, May 21).
- Kolden, Crystal A., *et al.* "Wildfires in 2023." *Nature Reviews Earth & Environment* 5.4 (2024): 238-240.
- Pyne, Stephen J. *Awful Splendour: A Fire History of Canada*. University of British Columbia Press, 2008.

- Pyne, Stephen J. *The Pyrocene: How we Created an Age of Fire, and What Happens Next*. University of California Press, 2022.
- Schlickman, Emily, and Brett Milligan. *Design by Fire: Resistance, Co-Creation and Retreat in the Pyrocene*. Routledge, 2023.
- Struzik, Edward. *Firestorm: How Wildfire will Shape our Future*. Island Press, 2017.
- Vaillant, John. *Fire Weather: The Making of a Beast*. Vintage Canada, 2024.

- Technology requirements:
    - To successfully engage in their learning experiences at the University of Calgary, students 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, including 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
- BDCI Makerspace Training Requirement:
    - If a course requires the use of the BDCI Makerspace, students must complete all relevant online University of Calgary safety courses and the online Trajectory Safety training course to be granted access to the BDCI Makerspace.

Special Budgetary Requirements:

This course includes a one-day field trip to Banff National Park in late September or early October (date TBD). While there are no mandatory supplementary fees, students will be responsible for covering their own travel-related expenses. We will organize an informal carpool to and from Banff; students should anticipate minor costs associated with transportation (e.g., gas contributions) and meals during the day. There are no additional required materials or equipment beyond standard studio supplies.

Additional Classroom Conduct and Related Information:

- **Code of Conduct:** The SAPL Studio spaces 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.

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	Description	Weight	Aligned Course Learning Outcome
Progress and review of assignment deliverables	**A1 Fire Foundations**: Students will conduct individual research on wildfire ecology, Indigenous fire stewardship, and fire-responsive design strategies, producing a visual brief that contributes to a shared studio resource.	25%	1, 2, and 3
Progress and review of assignment deliverables	**A2 Sites and Systems**: Working in pairs, students will analyze the Banff townsite and surrounding WUI through mapping, observation, and documentation, including preparations for and reflections on the field trip.	35%	1, 2, 3, and 5
Progress and review of assignment deliverables	**A3 Designing with Fire**: Student pairs will develop site-specific design interventions for Banff that respond to evolving fire conditions, culminating in drawings, models, and narratives that explore fire-adapted futures.	40%	1, 2, 3, 4, and 5

- Assessment and Evaluation Information:
  - If a student misses (or is late for) a required component of the course for a valid excuse or absence, they must contact the instructor in writing within 24 hours to discuss applicable options to submit and/or make-up for that component.
  - Alternate arrangements for missed in-person assessments *with a valid excuse* will be made on a case-by-case basis at the discretion of the Instructor and upon review of the student's class participation and attendance record.
  - For example, students who have missed an in-person assessment (e.g., oral presentation) as a result of an excused absence may be asked—*if applicable to the assessment*—to submit a self-recorded video (via Zoom's auto-record feature) in lieu of an in-person engagement.
  - For assessments submitted online (e.g., D2L), late assignments *with a valid excuse* may be considered for grading without penalty at the discretion of the Instructor and upon review of the student's class participation and attendance record. Otherwise, the course's standard grade penalties (indicated below) will apply.

- For assessments submitted online (e.g., D2L), all late assignments *without a valid excuse* will lose a letter grade (e.g., A- to B-) every 24 hours after the submission date/time. Late assignments submitted more than four days late constitute an automatic zero (0).
- Missed in-person assessments (e.g., oral presentation, exam, etc.) as a result of an *unexcused* absence will receive an automatic zero (0).
- Work will be completed individually or in pairs, based on specifications of each assignment brief. Students will receive a common grade for work done in pairs or groups, unless it is clear to the instructors that the balance of work has been unfairly distributed between team members. In this case, the distribution of work and grades will be discussed with the students.

- 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 Instructor.
  - 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 arrangements must be approved by the Instructor 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 AND 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 (e.g., projects, papers, presentations, etc.) must be turned in on time.
  - Please submit all assignments electronically through Dropbox in D2L. Assignments may be submitted in PDF format (unless otherwise stated). Assignments should have a file name as follows: "Lastname_Firstname_Assignment" (e.g., Smith_Alex_A1).
  - Students are responsible for ensuring that all submitted digital files are in the correct format, complete, and accessible. Submissions that are corrupt, empty, overly large (e.g. typically exceeding 10-15MB), incorrect (e.g., wrong file type), or inaccessible may receive a grade of zero. It is not the Instructor's responsibility to verify or notify students of submission errors. Students are encouraged to double-check their uploads and retain confirmation of successful submission.

- Late Assignments:
  - Please see the above course policy on late assignments and/or assessments.
  - Assignments must be submitted on time, as per instructions for each regarding digital or physical submissions. Late submissions will be penalized as per the briefs to be handed out at the beginning of each assignment. Typically, late assignments are penalized by a half letter grade per weekday (weekends count as one day).
- Final Examinations:
  - This course has no final examination.
- Expectations for Writing:
  - Please see the "Copyright and Legislation" Section of the University of Calgary Policies and Supports for information on the use of AI in this course.
  - Section E.2 Writing Across the Curriculum: https://calendar.ucalgary.ca/pages/2c2d1ce47b8c4d008aec9cc3da49876e
  - All resources used in the process of development and production of all assignments must be acknowledged and properly cited, including but not limited to, articles, books, texts and images from websites, and text and images generated with artificial intelligence (AI) tools.
- Criteria that must be met to pass:
  - Each component of the course must be completed, and a passing grade (minimum B-) achieved, to pass the course as a whole. Because the studio work is evaluated during reviews, all work must be completed on time, and all students must take part in the presentations and reviews. Late pin up/submission of material to be presented in studio reviews is not acceptable and grades will be deducted for work pinned up or submitted later than the deadline specified in the course/project brief or as discussed in class.
  - Students who receive a failing grade may be given an opportunity to submit a remedial assignment, which must satisfy expectations and due dates.

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, with the exception of the following courses:

- Architecture 201
- Landscape Architecture 201
- Planning 201

Grading Scale:

Based on Section F.1.1 of the Academic Calendar

Grade	Grade Point Value	4-Point Range	Percent	Description
A+	4.00	4.00	95-100	Outstanding performance
A	4.00	3.85-4.00	90-94.99	Excellent performance
A-	3.70	3.50-3.84	85-89.99	Approaching excellent performance
B+	3.30	3.15-3.49	80-84.99	Exceeding good performance
B	3.00	2.85-3.14	75-79.99	Good performance
B-	2.70	2.50-2.84	70-74.99	Approaching good performance
C+	2.30	2.15-2.49	65-69.99	Exceeding satisfactory performance
C	2.00	1.85-2.14	60-64.99	Satisfactory performance
C-	1.70	1.50-1.84	55-59.99	Approaching satisfactory performance. **Minimum grade requirement for SAPL prerequisite courses.**
D+	1.30	1.15-1.49	50-54.99	Marginal pass. Insufficient preparation for subsequent courses in the same subject.
D	1.00	0.50-1.14	45-49.99	Minimal Pass. Insufficient preparation for subsequent courses in the same subject.
F	0.00	0-0.49	0-44.99	Failure. Did not meet course requirements.

Topic Areas and Detailed Class Schedule *subject to change

Week 1	Tuesday Sept 2	Studio Lottery day
	Friday Sept 5	Course introduction. **A1: Fire Foundations assigned**
Week 2	Tuesday Sept 9	Desk crits: preliminary research directions
	Friday Sept 12	Desk crits: fire management typologies, techniques, and approaches
Week 3	Tuesday Sept 16	Desk crits: research visualization
	Friday Sept 19	Desk crits: shared resource development
Week 4	Tuesday Sept 23	**A1 Pin-Up. A2: Site and Systems assigned** a1 now on friday sept 26
	Friday Sept 26	Desk crits: preliminary site analysis. Discussion of field trip logistics.
Week 5	Tuesday Sept 30	No class – Truth and Reconciliation Day (University closed)
	Friday Oct 3	No in-person class – independent work session
Week 6	Tuesday Oct 7	**Field trip: Banff National Park**
	Friday Oct 10	Desk crits: field trip debrief + site analysis development
Week 7	Tuesday Oct 14	Desk crits: site analysis progress
	Friday Oct 17	Desk crits: site analysis visualization and layout
Week 8	Tuesday Oct 21	**A2 Pin-Up. A3: Designing with Fire assigned** A2 now on Fri Oct 24
	Friday Oct 24	Desk crits: site selection
Week 9	Tuesday Oct 28	Desk crits: conceptual development
	Friday Oct 31	Desk crits: schematic design
Week 10	Tuesday Nov 4	Desk crits: representation and layout
	Friday Nov 7	**A3 Midreview Pin-Up**
Week 11	Nov 9 – 15	No class – Term Break (University closed)
Week 12	Tuesday Nov 18	Desk crits: Midreview debrief, refining concept and design
	Friday Nov 21	Desk crits: project refinement
Week 13	Tuesday Nov 25	**A3 Silent Review Pin-Up**
	Friday Nov 28	Desk crits: Silent Review debrief, project refinement
Week 14	Tuesday Dec 2	Desk crits: project finalization
	Friday Dec 5	**A3 Final Review + Reception. Last day of classes.**

University of Calgary Policies and Supports:

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/legal-services/university-policies-procedures/student-non-academic-misconduct-policy).

Notice to Students Regarding Use of Generative Artificial Intelligence (AI) Applications and Tools in Learning Environments

Restricted Use: The use of generative AI, including the use of work created by generative AI tools and applications in course assignments and assessments may be considered in accordance with the university's academic misconduct policy. https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-policy If you are in doubt as to the use of generative AI tools in this course, please discuss your situation with the course instructor.

- AI tools can be used for learning course material but not for completing assignments (including both written and visual work).
- The use of AI tools for assignments may be considered an academic offense.
- Students must not copy or paraphrase from AI applications for assignments.

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.

PROTECTION OF PRIVACY ACT

The University of Calgary (University) respects your privacy and is committed to ensuring the privacy of all students, staff, and community members. UCalgary's collection, use, and disclosure of your personal information is authorized under section 4(c) of the Alberta Protection of Privacy Act (POPA). It will be collected, used and disclosed as permitted under POPA and in accordance with the University's Privacy Policy and Notice of Collection, Use and Disclosure of Student Personal Information. All student assignments and personal information provided to your course instructor will remain confidential unless otherwise stated before submission. It will not be disclosed to anyone else without your permission unless permitted under POPA.

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://calendar.ucalgary.ca/uofcregs/university-regulations/reappraisal-term-work) 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

Glossary of Wildfire Terms

Buffer Zones	Strategic areas of reduced vegetation or land use intensity that serve to separate high-risk wildland areas from vulnerable infrastructure or communities. Buffer zones help slow or redirect the spread of wildfire and protect key assets.
Climate Feedback	A process by which the effects of climate change can amplify or dampen further change. In wildfire contexts, fires release stored carbon into the atmosphere, which increases greenhouse gas concentrations and further accelerates warming—a reinforcing (positive) feedback loop.
Combustible Biomass	Any organic material (like grasses, shrubs, dead trees, and leaf litter) that can catch fire and fuel a wildfire. High amounts of combustible biomass increase fire intensity and spread.
Cultural Burning	The intentional, controlled use of fire by Indigenous peoples to manage ecosystems, maintain biodiversity, support traditional practices, and enhance landscape resilience. Cultural burning is deeply rooted in Indigenous knowledge systems.
Fire Management Zone	A designated area within a landscape where specific wildfire response strategies are applied, based on values at risk (e.g., infrastructure, ecosystems) and fire behavior potential. Park Canada uses *intensive*, *intermediate*, and *extensive* management categories.
Fire Regime	The long-term pattern of fire in a particular landscape, including its frequency, intensity, size, seasonality, and ecological role. Understanding fire regimes helps inform effective management and design responses.
Fire Suppression	Efforts to extinguish or prevent wildfires from spreading, often through firefighting operations. Long-term fire suppression can disrupt natural fire cycles and lead to fuel build-up, increasing future fire risk.
Fire-Adapted Infrastructure	Buildings, landscapes, and public amenities designed to withstand wildfire exposure through the use of non-flammable materials, defensible space, and integrated fire risk mitigation strategies.
FireSmart™	A planning and design framework used in Canada to reduce wildfire risk in communities through land use decisions, building codes, vegetation management, and public education. FireSmart practices aim to make communities more resilient to fire.

Forest Thinning	The selective removal of trees or underbrush to reduce forest density, lower fuel loads, and improve forest health. Thinning can help restore historical fire regimes and reduce the likelihood of high-intensity wildfires.
Fuel Break	A linear zone where vegetation has been cleared, reduced, or modified to slow or stop the spread of wildfire. Fuel breaks can be natural (e.g., rivers) or constructed (e.g., roads or managed vegetation strips).
Fuel Load	The total amount of burnable material—such as shrubs, grasses, fallen branches, and trees—present in a given area. Higher fuel loads typically increase fire severity.
Fuel Mosaic	A landscape design or ecological management approach that introduces variation in fuel types, densities, and spacing across a site to disrupt fire continuity and reduce spread. Mosaics promote ecological diversity and fire resilience.
Industrial Forestry	A system of large-scale, commercial forest management focused on maximizing timber production. It often involves clearcutting, monoculture planting, and fire suppression, and can increase landscape vulnerability to wildfire.
Low-Intensity Fire	A fire that burns at a relatively low temperature and flame height, typically consuming surface fuels without damaging mature trees. These fires are essential to many ecosystems and are often used in prescribed or cultural burning.
Mechanical Tree Removal	A wildfire mitigation strategy involving the use of machinery (e.g., masticators, chainsaws, harvesters) to thin or clear vegetation and reduce fuel loads in fire-prone areas, especially around communities or infrastructure.
Megafire	An extremely large and intense wildfire, typically defined as burning over 100,000 acres (or ~40,000 hectares). Megafires are increasingly common due to climate change, fire suppression, and high fuel loads.
Post-Fire Restoration	The ecological and cultural process of recovering a landscape after wildfire. This may include erosion control, native planting, habitat rehabilitation, and support for natural regeneration processes.
Prescribed Burn	A carefully planned and controlled fire used by land managers or Indigenous stewards to reduce fuel loads, restore ecological function, and maintain fire-adapted landscapes.

Smoke Plume	A visible column of smoke emitted from a wildfire. Plumes can travel great distances and carry harmful particles, significantly affecting air quality and public health.
Weather Window	A short, carefully monitored time period during which weather, fuel moisture, and wind conditions meet predefined criteria for safely conducting a prescribed fire.
Wildland–Urban Interface (WUI)	The area where developed communities meet or intermingle with wildland vegetation. These zones are particularly vulnerable to wildfire due to the overlap of human infrastructure and natural fuels.