

## ARCH 671 Technical Report

### Course Information

Fall 2022

ARCH 671 - 001 Technical Report

Units: 0.5 units

MTh 9:30AM - 12:20PM and 1:30PM - 5:20PM

Course instructor:

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### Territorial Acknowledgement

We acknowledge that the School of Architecture is located on the traditional territory of the Neutral, Anishinaabeg and Haudenosaunee peoples. The University is situated on the Haldimand Tract, the land promised to the Six Nations that includes 10 kilometres on each side of the Grand River. (see references here: <https://uwaterloo.ca/engineering/about/territorial-acknowledgement>)

### Course Description

Students will investigate and report on technical issues as they relate to the development of the Comprehensive Building Project in the Parallel Design Studio. Innovation and integration in architectural design will be stressed with respect to structure, building envelope, environmental systems, sustainable assessment system, health and life safety, movement systems, site planning and the integration of information technology.

### Learning Objectives

By the end of the course, students will be able to:

- Evaluate the function, intent and appropriateness of building design with its associated environmental impact in a given site.
- Explain how to minimize the consumption of resources through improving building's energy performance, materials technology, and life cycle analysis.
- Integrate proper structural design while describing assemblies and connections in addition to addressing lateral load resisting systems and stability issues.

- Demonstrate an adequate selection of mechanical systems, water and sanitary management, lighting and electrical systems in a given building.
- Explore the principles, techniques, and methods that correspond to enclosure design and sustainability measures.

### Required Text

Short readings and selected resources will be provided throughout the term. Guest lecturers and critics may assign readings before they present. Familiarity with all of the above are required for class discussion and evaluation.

### Course Requirements and Assessment

Technical Report includes:

- Site Design (10%)
- Enclosure (20%)
- Systems (15%)
- Carbon Report (10%)
- Structure (20%)
- Life Cycle (10%)
- Costing (15%)
- Appendix (not graded – but required)

\* Note: Descriptions for each of these components of the Technical Report are incorporated in the attached P2 Assignment handout with the syllabus.

### Topics & Schedule

Studio hours are Mondays and Thursdays from 9:30am-12:30pm and 1:30pm–5:30pm EST on days as indicated on the course schedule. Students are required to be working and available for studio discussion, attend and participate in all scheduled reviews, presentations, lectures and events that occur during these hours. Detailed schedules for each week will be communicated on a weekly basis.

### Course Delivery Platforms & Communication

To organize materials and communication outside of weekly in-person sessions, we will use the following:

MS TEAMS – Virtual Hub for the course. Used for organizing course documents, activities, and discussions. Students will be added to the course team in the first week of class.

LEARN – Official communication, work submission, and grade recording and release.

Miro – collaborative whiteboard to share, discuss, and annotate visual work, when needed.

### COVID-19 Special Statement

Given the on-going situation around COVID-19, students are to refer to the University of Waterloo's developing information resource page (<https://uwaterloo.ca/coronavirus/>) for up-to-date information on academic updates, health services, important dates, co-op, accommodation rules and other university level responses to COVID-19.

### Fair Contingencies for Emergency Remote Teaching

To provide contingency for unforeseen circumstances, the instructor reserves the right to modify course topics and/or assessments and/or weight and/or deadlines with due and fair notice to students. In the event of such challenges, the instructor will work with the Department/Faculty to find reasonable and fair solutions that respect rights and workloads of students, staff, and faculty.

### Late Work

Assignments that are handed in late will receive an initial penalty of 20% on the first calendar day late and a 5% penalty per calendar day thereafter. After 5 calendar days, the assignment will receive a 0%.

Only in the case of a justified medical or personal reason will these penalties be waived, and only if these have been officially submitted to the [Undergraduate Student Services Co-Ordinator](#) and accepted by the Undergraduate Office.

Students seeking accommodations due to COVID-19, are to follow Covid-19-related accommodations as outlined by the university here: (<https://uwaterloo.ca/coronavirus/academic-information#accommodations>).

### Passing Grades

The minimum passing grade for all projects and assignments in this studio course is 70%. Grades below this passing grade result in a course failure.

### CACB Student Performance Criteria

The BAS/MArch program enables students to achieve the accreditation standards set by the Canadian Architectural Certification Board as described [here](#). This course addresses the CACB criteria and standards that are noted on the Accreditation page of the School of Architecture [website](#).

### Mental Health Support

All of us need a support system. We encourage you to seek out mental health supports when they are needed. Please reach out to Campus Wellness (<https://uwaterloo.ca/campus-wellness/>) and Counselling Services (<https://uwaterloo.ca/campus-wellness/counselling-services>).

We understand that these circumstances can be troubling, and you may need to speak with someone for emotional support. Good2Talk (<https://good2talk.ca/>) is a post-secondary student helpline based in Ontario, Canada that is available to all students.

### Equity, Diversity and Inclusion Commitment

The School of Architecture is committed to foster and support equity, diversity and inclusion. If you experience discrimination, micro-aggression, or other forms of racism, sexism, discrimination against 2SLGBTQ+, or disability, there are several pathways available for addressing this:

A) If you feel comfortable bringing this up directly with the faculty, staff or student who has said or done something offensive, we invite you, or a friend, to speak directly with this person. People make mistakes and dealing them directly in the present may be the most effective means of addressing the issue.

B) you can reach out to either the [Undergraduate office](#), [Graduate office](#), or Director ([Anne Bordeleau](#)). If you contact any of these people in confidence, they are bound to preserve your anonymity and follow up on your report.

C) You can choose to report centrally to the Equity Office. The Equity Office can be reached by emailing [equity@uwaterloo.ca](mailto:equity@uwaterloo.ca). More information on the functions and services of the equity office can be found here: <https://uwaterloo.ca/human-rights-equity-inclusion/about/equity-office>.

D) [Racial Advocacy for Inclusion, Solidarity and Equity \(RAISE\)](#) is a student-led Waterloo Undergraduate Student Association (WUSA) service launching in the Winter 2019 term. RAISE serves to address racism and xenophobia on the University of Waterloo campus with initiatives reflective of RAISE's three pillars of Education and Advocacy, Peer-to-Peer Support, and Community Building. The initiatives include but are not limited to: formal means to report and confront racism, accessible and considerate peer-support, and organization of social events to cultivate both an uplifting and united community. You can report an incident using their [online form](#).

### Academic integrity, grievance, discipline, appeals and note for students with disabilities:

Academic integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check [the Office of Academic Integrity](#) for more information.]

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70, Student Petitions and Grievances, Section 4](#). When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline: A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for his/her actions. [Check [the Office of Academic Integrity](#) for more information.] A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course instructor, academic advisor, or

the undergraduate associate dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline. For typical penalties, check Guidelines for the Assessment of Penalties.

Appeals: A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals.

Note for students with disabilities: AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.

Turnitin.com: Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit the alternate assignment.