



UNIVERSITY OF
WATERLOO

FACULTY OF ENGINEERING
SCHOOL OF ARCHITECTURE

ARCH 693: Thesis Research and Design Studio II

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Office Hours: by appointment, office 2011

Class Details: Tuesday | 1:00 pm – 7:00 pm | ARC 3003

Science is certainty; research is uncertainty. Science is supposed to be cold, straight, and detached; research is warm, involving, and risky. Science puts an end to the vagaries of human disputes; research creates controversies. Science produces objectivity by escaping as much as possible from the shackles of ideology, passions, and emotions; research feeds on all of those to render objects of inquiry familiar.

Bruno Latour, 'From the World of Science to the World of Research', *Science* 280: 208-209

Within architectural education the thesis has been a valued technique for engaging the relationship between facts and fictions and, as a result, has provided an opportunity for both a personal and a disciplinary specific form of research.

David Salomon, 'Experimental Cultures', *JAE* 65: 33-44



Source: School of Architecture website, University of Waterloo

1. Territorial Acknowledgement

We acknowledge that the University of Waterloo is located on the traditional lands of the Neutral, Anishinaabeg and Haudenosaunee peoples. The earliest peoples were hunter/gatherers of, whom we know only by the artifacts they left behind. The first people encountered by Champlain were the Cholonon “people of the deer” - peaceful Iroquoians. Their neighbours were the Neutral and Petun peoples, along with the Hurons farther north, and south the Anishnaabeg Missisaugas.

The University is situated on the Haldimand Tract, the land granted to the Mohawk of the Six Nations that includes 10 kilometres on each side of the Grand River in 1794 by George III. They came there in exile from their traditional lands in New York State. They reside now on the largest [by population] First Nations Reserve in Canada. They are the direct neighbors of Waterloo Architecture.

We also acknowledge the generations of settlers who have made their home here among us. Often they were looking for the refuge our native ancestors had prepared for them. Text provided by Professor William Woodworth Raweno:kwaw, Elder in Residence. For more information, check: [here: https://uwaterloo.ca/engineering/about/territorial-acknowledgement](https://uwaterloo.ca/engineering/about/territorial-acknowledgement)

2. Introduction

There are two key requirements for any thesis:

1. A thesis needs to put forward a discussion on an intellectual proposition and its supporting evidence. A Master of Architecture thesis needs to be presented as a well-researched and adequately supported argument – it does not need to be an original or unique contribution to the field. Often, a thesis begins with an urgent question about the world we live in and progresses as the author defines and explores how architecture can address this question.
2. Your thesis needs to engage the practice of architecture and existing discourse critically and creatively. You must be clear about how you reinforce, advance, refute or challenge existing practices or debates. Additionally, you need to understand where your research situates itself within this larger field. This requires the refinement of a clear question, methodologies, knowledge of relevant literature and relevant precedents (whether they be methodological, programmatic, tectonic, site-based, or other).

The MArch thesis at the University of Waterloo could be one of three types: a design thesis, a research thesis, or a hybrid. Regardless of the type you choose, your thesis is a unique opportunity to conduct your own research and position yourself within the discipline. It is a synthesis of interests you likely have held across moments in your education and work experiences. Your thesis presents you with an opportunity to put forth a set of questions and interests that might propel future work, whether they be professional or academic.

3. Course Objectives

The primary objective of ARCH 693 – is to support the development of your thesis. There are four sub-objectives for this course:

1. The course provides a framework of lectures, workshops and exercises that **supports your progress on thesis**. Topics covered here include academic-related policies and procedures as well as research tools used in planning, organizing, and producing your research.
2. The course **foregrounds the writing activities each of you will undertake as part of your thesis**. The course organizes a series of peer review sessions and associated deliverables to address the development of text supporting your thesis work. While each students' goals for writing will differ, the course focuses on delivering what are considered essential thesis text components such as an abstract, topic identification, relevance, and context, methods and expected outcomes. This text-focused work will culminate in the production of an essay which will either: (a) form the core of your writing if you are doing a design-research thesis or (b) become a distinct chapter/expanded outline of your book if you are doing a primarily written thesis.
3. Peer-review design sessions are **offered as opportunities to discuss your thesis with peers more broadly** - beyond its written components.
4. The course **provides you with opportunities to share your work with a wider audience as a mechanism to collect impressions, feedback, and suggestions on the work**. In addition to the peer-led sessions outlined above, two types of presentation days are planned through the term where students are expected to share their progress and get feedback. The first, Progress Presentation 1, will be very much like a traditional review where students will individually present their work. In the second mode, Progress Presentation 2, research-thesis students will organize symposia panels with member of their reading groups to discuss and present their work, while hybrid-thesis and design-thesis students will have a design crit/review. Efforts will be made to assemble committee members as well as other appropriate critics for each student presentation.

You will notice that this course does not directly support the development of the thesis from a topic, research, design, and production perspective. This type of work happens through independent efforts working directly with your thesis supervisor. It is expected that you maintain contact with your assigned thesis supervisor where project-specific issues and progress are discussed on a regular basis.

The intent is that by the end of the TRD II term, propelled by activities in this course and those guided by your supervisor, you will have a clear thesis question, a deliberate path toward completion, a timeline, a clear set of methods you intend to employ (and have practiced), and a sense of the type of outcomes you hope you achieve through your thesis work.

4. Course Goals and Learning Outcomes

By the end of the course, students are expected to:

1. Make effective work plans, progress and status update.
2. Use a variety of software tools to support thesis production (such as InDesign, Zotero and others).
3. Conduct effective self- and peer-reviews of written and design work.
4. Formulate a well-structured thesis argument through peer discussions and individual research.
5. Write a positioning paper, addressing essential thesis components such as abstract, topic and outline.
6. Present thesis work in a meaningful, engaging, and concise manner.
7. Be aware of various obligations and responsibilities you have in completing their thesis around academic writing, copyright and time management.
8. Be familiar with UW resources to support graduate students in completing their theses work (such as the Student Success Office and the Writing Communication Centre).

5. Course Structure

The term consists of a series of organized events, lectures and submission requirements. Each event is structured to provide technical support on different aspects of your thesis development. The course is scheduled to meet Tuesdays from 1:00pm - 7:00 PM, except on February 7th and 28th where it is scheduled from 1:30 - 7:30 PM. For the most part, these meetings will be organized in two blocks. The first block (1:00-3:30) will be typically filled with guest lectures, workshops, and other class-wide discussions. The second block (4:00-7:00) will typically be used for students to meet in small working groups to participate in various peer-review, peer-learning activities. We may need to deviate from this blocked approach to allow for longer workshops etc. On days where students will be making progress presentations, schedules will be more elaborate, and plans will be communicated beforehand. Please work in studio on studio days. Be in full attendance in the studio at the scheduled studio times. All assigned parts of the work must be completed. Punctual completion is required.

6. Course Requirements and Assessment

The requirements and assessments for the course reinforce its objective to offer a framework for supporting thesis development. The requirements are as follows:

	Core Deliverables	Deadline
Specifications graded 90%	Keyword exercise	Jan 10 th @ 7PM
	Thesis presentation	Jan 17 th
	Progress Reports	Due weekly/biweekly
	Writing group summaries	Jan 17 th , 24 th Feb 7 th , 28 th March 7 th , 21 st
	Decide on thesis type	Jan 24 th
	Peer crit pin-ups	Jan 31 st , March 14 th
	Visual progress book	April 6 th
	In-class presentation	March 7 th , 14 th
	Progress Presentation 1 (Individual)	Feb 14 th
	Progress presentation 2 (individual or group, depending on thesis type)	March 28 th , April 4 th
Partially self- evaluated 10%	Participation	Ongoing

Keeping in line with the goals of the course, participation and engagement drive the assessment model for this course. The course uses a grading method called specification grading – intended to increase your agency in determining your grades by making explicit routes students can take to achieve certain grades while simultaneously shifting the focus to learnings rather than performance.

While there are many ways to implement the specification grading model, we define a series of levels for submitting the requirements outlined above in this course. Each level leads to a specific grade. You decide what you want to get out of the course and how much effort you want to put in, and then receive that grade.

Each assessment is considered pass/fail. **To pass is to complete the task at an average level (in graduate courses, work that would receive ~ 79-82%) - that is to say, work that expresses competency.** Any late or missing task/element or one that does not meet the accepted level would receive a grade of “fail.”

You are required to pass all the requirements listed in level 1 below to pass the course.

After that, you choose which elements you want to complete. Here are the assessment levels to specific grades for the **Core Deliverables** portion of your grade:

Level	Level Requirements	Deadlines	Grade percentage of 90% ***
Level 1*	<ul style="list-style-type: none"> • Complete keywords exercise • Present your thesis • Submit final paper ** • Complete progress presentation 1 • Complete progress presentation 2 	January 10 th @ 7 PM January 17 th April 15 th @ 5 PM February 14 th April 4 th	70%
Level 2*	<ul style="list-style-type: none"> • Meet level 1 • Submit paper abstract and outline ** • Participate in peer crit sessions (x2) 	March 7 th @ 7:30 PM 7 PM on session day	76%
Level 3	<ul style="list-style-type: none"> • Meet Level 2 • Submit a visual progress book of your thesis design/research iterations ** • Submit bi/weekly progress reports (x3) • Submit working group summaries (x3) • Ask questions to our guest speakers 	April 6 th @ 12 pm Weekly/biweekly 7 PM on session day When we have a guest	83%
Level 4	<ul style="list-style-type: none"> • Meet Level 3 • Submit two additional weekly/biweekly progress reports • Submit three additional working group summaries 	Weekly/biweekly rollover basis 7 PM on session day	88%
Level 5	<ul style="list-style-type: none"> • Meet level 4 • Give an in-class presentation on a pre-agreed topic 	March 7 th , 14 th	92%

* Levels 1 and 2 meet CACB SPC B1 as explained in section (5) of this document.

** Indicates the possibility of using a late token, see section (9) below.

*** Percentage in this column is a percentage of the 90%. For example, 70% of 90% gives you a total grade of 63/90. The 63, in addition to your participation, will be your final grade in this course.

Note: A detailed description and guidelines of each requirement will be sent separately.

7. Late Work

Specification grading models encourage the potential for resubmission through a token system. A token is an opportunity to discuss a missed or failed task with the instructor and submit or revise and submit the task within two days of the original due date. If you must miss a deadline for whatever reason or receive a mark of “fail”, you have one token to use over the term. Your token can only be used for specific assignments; these include the final paper in level 1, the paper outline and abstract in level 2 and the visual progress book in level 3. Any assignment submitted more than two days after using the token will

be considered late and will receive a 'failure' as a final grade. **Note: please submit on time. Submission will be through Learn and submission dropbox will close 5 mins after the deadline.**

Due to the collaborative nature of this course and how it depends on your thesis development, all other assignments that are handed in late will receive 0%. Except when using a token where allowed, no other late work is accepted in this course. 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 Graduate Student Services Co-Ordinator (archgradoffice@uwaterloo.ca) and accepted by the Graduate 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/instructor-information-and-resources#absence>.

8. Your Thesis Type, Progress and Committee

8.1 Thesis type: your MArch thesis could be one of three types:

- Design thesis: a design thesis is expected to be 5000 – 10000 words long, in addition to a design project.
- Research thesis: a research thesis is around 20000 – 25000 words long.
- Hybrid: A hybrid thesis (a mix of design and research) is approximately 10000 – 20000 words.

To facilitate thesis completion within three to six terms as decided by the School of Architecture, **you should decide on your thesis type by the third week of this term, ideally January 24th**. This decision is important because:

1. It will guide your thesis progress and your progress in this course.
2. Progress presentations will be determined based on your thesis type: design theses will have design reviews, not presentations. Therefore, you are expected to have significant design progress by the end of the term. TRD2 is a cut-off; if the main elements of your design are not ready by the end of this term (progress presentation 2), you will be asked to switch to a research or hybrid thesis, which will significantly impact and extend your completion date. This becomes particularly important if you have a tight completion schedule due to other commitments (like work, visa, family, financial commitments..etc.)

8.2 Your committee:

You are responsible for meeting with your supervisor regularly, ideally every one to two weeks this term, and determining what type your thesis will be (research, design, or hybrid). You should also consult with your supervisor and build your committee this term. For more information, please consult the MArch Graduate Student Handbook <https://uwaterloo.ca/architecture/current-graduate-students>

Important: please note that you need to submit your thesis at least 6 weeks before the end of the term you wish to finish by. For example, if you wish to be done by the end of the Winter term (which ends in April), you must submit your final thesis for defence by mid-March, the latest.

9. CACB Accreditation

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](#).

Based on the CACB Student Performance Criteria (SPC), this course meets criteria B1, described “the student must demonstrate an ability to raise clear and precise questions; record, assess, and

comparatively evaluate information; synthesize research findings and test potential alternative outcomes against relevant criteria and standards; reach well-supported conclusions related to a specific project or assignment; and write, speak, and use visual media effectively to appropriately communicate on subject matter related to the architectural discipline within the profession and with the general public.” The core assignments in Level 1 and level 2 in this document support B1 criteria.

10. Topics and Schedule

Week	Date	Time	Details
W1	January 10 th	1:00 - 7:00 PM	Course Introduction Keyword Exercise [due @ 7:00 PM]
W2	January 17 th	1:00 - 3:30 PM	Thesis presentations Introduction to paper abstract and outline
		4:00 - 7:00 PM	Writing Group 1 (WG1)
W3	January 24 th	1:00 - 3:30 PM	Workshop: Michelle Bullough – InDesign for long documents
		4:00 - 7:00 PM	Writing Group 2 (WG2)
			Decide on thesis type [due @ 7PM]
W4	January 31 st	1:00 - 3:30 PM	Lecture: Jirina Poch (Writing and Communication Centre) and Catherine Chan (Student Success Office)
		4:00 - 7:00 PM	Peer Crit Session 1 (PCS1) pinups
W5*	February 7 th	1:30 - 4:00 PM	Ask Me Anything Session with Anwar
		4:30 - 7:30 PM	Writing Group 3 (WG3) – prep for presentation
W6	February 14 th	1:00 - 7:00 PM	Progress Presentations 1 ** (with committee members/guests) Schedule TBD
	February 21 st		Reading Week – No class
W7*	February 28 th	1:30 - 4:00 PM	Lecture: Lauren Byl (Dana Porter Library, Copyright and Licensing Librarian)
		4:30 - 7:30 PM	Writing Group 4 (WG4)
W8	March 7 th	1:00 - 3:30 PM	Workshop TBD – In-class presentation opportunity
		4:00 - 7:00 PM	Writing Group 5 (WG5)
			Paper abstract, outline due @ 7PM
W9	March 14 th	1:00 - 3:30 PM	Workshop TBD – In-class presentation opportunity
		4:00 - 7:00 PM	Peer Crit Session 2 (PCS2) pin ups
W10	March 21 st	1:00 - 3:30 PM	Ask me anything session with Anwar
		4:00 - 7:00 PM	Writing Group 6 (WG6) prepare for final presentation
W11	March 28 th		Progress Presentations 2 ** with committee members/guests)
W12	April 4 th		Progress Presentations 2 ** with committee members/guests)
	April 6 th		Visual progress book [due @ 5 PM]
	April 15th		Final paper [due @ 5 PM]

* Late start of class to accommodate faculty meetings.

** Efforts will be made to include your thesis supervisors and committee members.



Source: School of Architecture website, University of Waterloo

11. Course Delivery Platforms & Communication

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

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

MS TEAMS – Used for supplementary discussions outside of in-person class time. Students will be added to the course team in the first week of class.

12. COVID-19 Special Statement & Declaration of Absence

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.

If you feel sick and cannot come to class, please make sure you complete the declaration of absence: <https://uwaterloo.ca/quest/help/students/how-do-i/self-declare-absence-graduate-students>

13. 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.

13. 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.

14. 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 interim Director ([Maya Przybylski](#)). 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. 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](#).

15. 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.