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 | 9:30 am – 3:30 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 Cholondon "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:kwas, Elder in Residence. For more information, check: here: 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).

Your thesis 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 student's goals for writing will differ, the course focuses on delivering what are considered essential thesis text components, such as an abstract, topic identification, relevance, context, methods, and expected outcomes. This text-focused work will culminate in the production of an essay that 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 and presentations 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 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 through peer learning 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, academic integrity and copyright.
8. Be familiar with UW resources to support graduate students in completing their theses work (such as the Writing Communication Centre, the libraries and their services and others).

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 9:30 AM - 3:30 PM. For the most part, these meetings will be organized in two blocks. The first block (9:30 - 11:45 AM) will be typically filled with guest lectures, workshops, and other class-wide discussions. The second block (12:45-3:30 PM) will typically be used for students to meet in small workings groups to participate in various peer-review, peer-learning activities. We may need to deviate from this blocked approach to allow for longer workshops or other activities On days where students will be making progress presentations, schedules will be more elaborate, and plans will be communicated beforehand.

Please work in studio as scheduled 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 80%	Keyword exercise	Jan 9th
	Thesis presentation	Jan 16th
	Progress Reports	Due weekly/biweekly
	Writing group summaries	Ongoing
	Peer-led design reviews and presentations	Feb 6th
	Submit paper abstract and outline	Feb 27th
	Midterm reviews: Progress Presentation 1	Feb 13th
	Final reviews: Progress presentation 2	March 26th, April 2nd
	Submit final paper	April 9th
10%	Attendance	Ongoing
10%	Sessions with Eric Rubin Beck	March 5th, 12th and 19th

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	Grade percentage of 80% ***
Level 1*	• Complete keywords exercise • Present your thesis • Submit final paper ** • Complete progress presentation 1 • Complete progress presentation 2	80%
Level 2*	• Meet level 1 • Submit paper abstract and outline ** • Submit bi/weekly progress reports (x4) • Submit writing groups summaries (x2)	84%
Level 3	• Meet Level 2 • Participate in peer-led reviews and presentations • Submit 4 additional bi/weekly progress reports • Submit additional one working group summary	88%

* Levels 1 and 2 meet CACB SPC B1 as explained in section (10) of this document.
** Indicates the possibility of using a late token; see section (7) below.
*** The percentage in this column is a percentage of 80%. For example, 84% of 80 gives you a total grade of 67.2/80. The 67.2, in addition to the other 20% from attendance and grades from Eric Beck Rubin, will be your final grade in this course.
Note: A detailed description and guidelines for 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 and the paper outline and abstract in level 2. 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.**

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. Topics and Schedule

Week	Date	Time	Details
W1	January 9th	9:30 AM – 3:30 PM	Course Introduction Introduction to paper abstract and outline Keyword Exercise [due @ 3:30 PM]
W2	January 16th	9:30 AM – 3:30 PM	Writing groups allocations Thesis presentations
W3	January 23rd	9:30 – 11:45 AM	Academic Integrity **Amanda McKenzie** Director, Office of Academic Integrity University of Waterloo
		12:45 – 3:30 PM	Writing Group 1
W4	January 30th	9:30 – 11:45 AM	Copyright and Licensing **Lauren Byl** (Copyright & Licensing Librarian Collection Development, Dana Porter Library University of Waterloo) and **Stephanie Mutch** (liaison librarian for Architecture, University of Waterloo)
		12:45 – 3:30 PM	Writing Group 2
W5*	February 6th	9:30 – 11:45 AM	Open session: ask anything and preparation for midterm reviews
		12:45 – 3:30 PM	Peer-led design reviews and presentations
W6	February 13th	9:30 AM – 6:30 PM*	Midterm reviews: Progress Presentations 1 * (with committee members/guests) Schedule TBD
	February 20th		Reading Week – No class
W7*	February 27th	9:30 – 11:45 AM	Open session: Midterm reviews feedback Assignment questions
		12:45 – 3:30 PM	Writing Group 3 Paper abstract and outline due @ 7PM
W8	March 5th	9:30 – 11:45 AM	Academic Writing **Eric Beck Rubin** (University of Waterloo)
		12:45 – 3:30 PM	
W9	March 12th	9:30 – 3:30 PM	Academic Writing **Eric Beck Rubin** (University of Waterloo)
W10	March 19th	9:30 – 3:30 PM	Academic Writing **Eric Beck Rubin** (University of Waterloo)
W11	March 26th	9:30 AM – 5:30 PM*	Final reviews: Progress Presentations 2 ** with committee members/guests)
W12	April 2nd	9:30 AM – 5:30 PM*	Final reviews: Progress Presentations 2 ** with committee members/guests)
	April 9th		Final paper submission

* Note: a longer class on that day.
** Efforts will be made to include your thesis supervisors and committee members.

9. Your Thesis Type, Progress and Committee

8.1 Thesis type: your MArch thesis could be:
- 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.

To facilitate thesis completion within three to six terms as decided by the School of Architecture, **it is important that you decide on your thesis type as early as possible.** 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.

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 (researcher design). 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

10. 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.

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.

14. 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.

15. 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.

16. 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 their 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 their 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.

In general, you are required to undertake work that you represent as yours by yourself, without copying or adapting work by other, with the exception of work that you derive from others and in turn credit to those others. 'Others' includes AI tools. All work derived from others must be appropriately cited.

AI Policy: Permitted in this Course with Attribution: In this course, students are permitted to use Generative AI Tools like ChatGPT and Midjourney to support their work. In order to maintain academic integrity, students must disclose any AI-generated material they use and properly attribute it. This disclosure should include AI generation whether in whole or part, including images, designs, in-text citations, quotations, and references.

The full extent of images and text passages should be cited. The following statement in assignments may be used to indicate general use of a Generative AI Tool: "The author(s) acknowledges the use of [Generative AI Tool Name], a model developed by [Generative AI Tool Provider], in the preparation of this assignment. The [Generative AI Tool Name] was used in the following way(s) in this assignment: [indicate, e.g. grammatical correction, gathering sources, generating specific images, etc.]."

Caution: When using AI tools, it is important to be aware that the user data supplied might be utilized for training AI models or other purposes. Consequently, there is no guarantee that the information you provide will remain confidential. Instructors and students should exercise caution and avoid sharing any sensitive or private information when using these tools. Examples of such information include personally identifiable information (PII), protected health information (PHI), financial data, intellectual property (IP), and any other data that might be legally protected.

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.