WINTER 2019 CORE CLASSES - MB STUDENTS

ARCH 690 – Design Studio
Andrew Levitt
Monday 9:30-12:30 & 1:30-5:30 / Thursday 9:30-12:30 & 1:30-5:30

ARCH 642 – Modernism to the 21st Century
Marie-Paule Macdonald
Tuesday 10:00AM-1:00PM & Friday 10:00AM-1:00PM

This course examines the cultural, architectural and urban history of that complex period known as modernism. It is an overview of the individual works, movements and critical texts associated with the evolution of modern architecture and urbanism from the beginning of the 20th century to the early years of the second millennium. The social, technological and aesthetic ambitions of the modern project are critically reviewed and its development and dissemination in Europe, the Americas and Asia is traced. Selected works are examined in depth as examples of the canonic and vibrant forms of modernism.

ARCH 662 – Steel & Concrete: Design, Structure and Construction
Andrea Atkins
Wednesday 2:00-5:00PM ARC 1101 - Lecture
Monday 7:00-9:00PM ARC 1101 - Tutorial

WINTER 2019 CORE CLASSES - THESIS STUDENTS

ARCH 693 - Thesis Research and Design Studio II
In-class time schedule: W 1:30-5:30PM & 6:30-8:30PM*
*Please note a formal in-class lecture may not be scheduled every week – the schedule of in-class time will be confirmed at the beginning of term in course syllabus.

ARCH 655 – Architectural Professional Practice: Ethics, Business, Legal Issues and Contract Administration
Block course April 8-12th & April 15-18th, each day from approximately 9:00 AM-5:00 PM

Winter 2019 Graduate Electives

ARCH 684_001 – Philosophy in Architecture
Marie-Paule Macdonald
Thursday 2:00-5:00 PM ARC 2026

Note - not open to students if course was taken as elective in the Bachelor of Architectural Studies.

This seminar uses the close reading approach to study selected texts by contemporary philosophers. The selection of philosophers is based on their reference to architectural and urban themes. What is meant by close reading? This approach will use small chapters and shorter texts to gain access to the approach. Rather than reading vast quantities of material, the class will look at fragments and discuss the content. This will give students an opportunity to pursue reading in greater depth during thesis. Texts will be selected by students during the first seminar. The second seminar will present several of the philosophers' work available as streamed video by Tate Modern, and ubu.com, for example. The order of the seminars will be determined as a function of student selection of texts. Currently most of the selections are available as digital copies. It may be possible to add additional texts.
ARCH 684_002 – New Geometric Systems Jakebs Zvilna and integrative form-languages
Philip Beesley
Thursday 9:30AM -12:30PM ARC 2026

This research and directed design elective course will study innovative combinations of primary geometric systems- lattices, arrays, membranes, guided by Waterloo Architecture professor Jakebs Zvilna’s pioneering research during the1960’s and 70’s. The course will explore conceptions of geometry as form-language by developing digital models, drawings and texts that explore this work within a broad background of contemporary ‘organicism’ and complex-systems studies. The group would create a small exhibition that would be presented at the Living Architecture Systems Group symposium in March’19, documented within a folio to be published by the LASG with Riverside Architectural Press.

Zvilina said ‘I see now two and three-dimensional forms organization, development, genesis in time-space: 1) a spiral l understand not as a construction but as an emergent through a formative process, when matter in continuous rotation is exposed to a linear force…. In opposition to nature’s order, the structured patterns display ‘natural order’\[\[\]

Zvilina’s extraordinary models, photographs and drawings can be positioned as a unique contribution to seminal architectural theory. The folio and exhibition could provide previously unpublished material to contemporary architectural theory. Zvilina’s conceptions anticipate surging development in contemporary complexity studies. Sources that would be included include Synergetics by the American engineer Buckminster Fuller and the wide interdisciplinary gathering of the Vision and Value publication series edited by theorist Gyorgy Kepes, together with. contemporary literature and architectural manifestos including Patrik Schumacher’s ‘Parametricism’ and Jenny Sabin and Cecil Balmond’s ‘Meander’.

The course would include a focus on research by Living Architecture Systems Group collaborators, and would include collaboration with professor Val Rynnimeri and other professors emeriti from Waterloo.


ARCH 684_003 - CONCATENATIONS: Deleuze and Contemporary Architecture
Derek Revington
Tuesday 9:30AM- 12:30PM ARC 2026

Gilles Deleuze asserts that great artists are also great thinkers, but they think in terms of the logic of sensation and through percepts and affects. Architects think in sensible aggregates of matter in space- time, musicians think in sounds, writers in words, filmmakers in “movement-images” and “time-images”, and painters in color and line. But architecture, as Deleuze says, “is the first of the arts’ from which all the others draw their frames”.

This experimental seminar will focus on the theories and generative practices that a Deleuzian ontology has spawned over the last two decades with particular emphasis on architecture, cinema and the visual arts. Students will explore productive concatenations between these practices through selected readings, through seminar presentations, writing, and the creation of non-discursive artifacts.

ARCH 684_004– Towards an Open Architecture
Jonathan Enns
Tuesday 2:00 - 5:00PM ARC 2026

All technologies: hardware, software, engineering, and architecture - have positive and negative impacts on their users. In some cases, technologies like the telephone can produce liberating effects (like not having to physically travel for a conversation). In others like the handcuff, user freedom is restricted. In the 1970s, Architectural historian Robin Evans coined these realities ‘positive’ and ‘negative’ interference. For Evans, positive interference is ‘any change in the ambient universe that allows an expansion of possible actions but does not produce any restriction…’ Conversely, negative interference, ‘involves changes that restrict possible actions without producing any extra or alternative actions that were not viable before’. Evans acknowledged that most technologies are, in fact, combinations of both, something he termed ‘synthetic systems’ giving the ordinary road as an example:

“If a main road is laid along someone’s frontage it may well mean that he can cut his home / work travelling time by half. The road is giving him, in this way, more time free of specific constraints, and is therefore positive interference. But it may also mean that his wife has to ferry the kids to and from school because of
Architecture is a highly synthetic technology. The elements that constitute the standard multi-family residence such as Walls, Doors, Windows, Kitchens, Bathrooms, Hallways, Elevators, Stairways, Lobby’s, Parking - are all hybrid performers, producing positive effects like sound separation, security, air & light, the ability to prepare meals and the separation of family, access, egress etc. However, the way in which they are composed during the process of building design can also produce negative interference.

How much time do Architects spend looking at the effects of negative interference in their designs? How well do Architects understand the routines and lives of their eventual building occupants, and how well designed are their buildings to minimize negative interference? One might argue that the increasingly common developer-as-client model means that Architects are, by definition, cut off from understanding the real effects of their designs on end-users, especially in the long term.

In this course, students will undertake foundational human centred design research in hopes of better understanding the impacts of negative spatial interference. Our class will perform 1:1 behavioral interviews with people within three sectors: high-rise residential, single family residential, and commercial office space. We will follow proven design industry methodologies to uncover high level insights into what makes people unsatisfied and unhappy with design aspects in these sectors.

Our work in the first half of the semester will culminate in a set of data visualizations that simplify our research findings. We will finish the term with a series of design solutions & prototypes that, alongside our data, will be formatted into a course booklet and/or website. Together, this work will contribute to a body of research that looks to maximize positive interference for people, improve impacts, and support a vision for a more open architecture.

1 Robin Evans, Translations from Drawing to Building and Other Essays

Robert Jan van Pelt
Wednesday 9:30AM-12:30PM ARC 2026

In the early 1960s the Canadian sociologist Erving Goffman articulated the concept of the total institution as “a place of residence and work where a large number of like-situated individuals, cut off from the wider society for an appreciable period of time, together lead an enclosed, formally administered round of life.” He listed five kinds of total institutions:

1. institutions established to care for persons felt to be both incapable and harmless, such as orphanages and nursing homes;
2. institutions established to care for persons felt to be incapable of looking after themselves and a threat to the community, albeit an unintended one, such as mental hospitals and leper colonies;
3. institutions that are organized to protect the community against what are felt to be intentional dangers to it, such as prisons and concentration camps.
4. institutions purportedly established the better to pursue some work-like tasks, such as boarding schools or work camps,
5. institutions designed as retreats from the world, such as abbeys and convents.

Today we might a sixth kind:

6. communities that are created in conditions that only allow for the maintenance of life within a protected environment, such as a polar research station.

Beginning with the creation of the Christian monastic tradition, total institutions have played an important role in the history of architecture. The challenge and opportunity to design an environment in which all aspects of life are conducted under a
single authority and following a single rule-book in a single place suggests the possibility of a total architecture. For many architects the brief for a total environment represents, if sufficient resources are made available, a dream job.

Until recently the likelihood of citizens in liberal democracies ending up in a total institution was remote. Yet with the rapid aging of the population and in the increased likelihood of having to negotiate some aspect of old age with diminished mental capacities means in North America up to 80% of the population will end their lives in a total institution. Thus the question of the architect’s role and responsibility in the creation of these places has become acute.

In a graduate seminar, we’ll explore the historical, architectural, sociological and moral dimensions of the total institution, the most difficult and exciting of architectural commissions.

ARCH 685 – Independent Research on Special Topics in Architecture

This course is intended allow students to cover materials not otherwise available in a graduate course offered in this, or nearby universities. These courses will usually consist of a program of directed reading, complemented with the writing of papers or participation in research. The research question and course content should be negotiated on an individual basis with a faculty member, whose research interests cover closely related material. A specific outline for the course of study must be developed by the student, in consultation with the professor in charge, and approved by the Graduate Officer in advance of the term in which a student wishes to take the course.

ARCH 686 – Competitions in Architecture
Terri Meyer Boake

This course provides an opportunity for the student to independently engage in the respected tradition of the Architectural Competition. The competition entry and accompanying research paper must focus on the use of architectural precedents as the basis for the creation of typologically based propositions. Submission to the external competition is mandatory, the timing and detailed requirements of which will determine one part of the academic requirements for this course. A student must develop a course outline, consisting of an outline for the research paper (including a preliminary bibliography), and the competition brief. Both the professor in charge, and the Graduate Officer, must approve the outline in advance of the term in which a student plans to take the course. Please review the guidelines here before contacting Terri
https://www.tboake.com/384-comp.html