

University of Waterloo School of Architecture

ARCH 684-002 - Design Build Graduate Elective - Winter 2018

First Nations / University of Waterloo Design Build Program 2018

Course instructors - John McMinn and Paul Dowling

COURSE DESCRIPTION

The architect Douglas Cardinal has said, 'Cultures are based in harmony as a way of being.' And the indigenous meaning was very close to that of the Greeks or of Leibniz or Shaftesbury. Harmony was a concept of the whole and of a balance that went far beyond mere humans. What's more, in their negotiations among themselves and with Europeans, Aboriginals invariably placed themselves and their argument within the concept of harmony. It was an all-inclusive view of the natural order of things, an order in which humans were merely a part. It related to their complex balancing of individualism and group and place, each existing at the same time apart, in complex relationships of cooperation and as nodes 'in an interconnected web.' There are myriad Aboriginal expressions for this. One well-known Cree concept is Witaskewin, or harmonious living, which means living together on the land, that is, an agreement to live together in peace. You could translate it today as democratic federalism or practical environmentalism.

John Ralston Saul

In Iroquoian/Haudenosaunee culture the two-row wampum belt, two parallel rows of purple on a white background, records the agreement of two distinct and autonomous peoples traveling along parallel paths in a compelling symbol. They operate independently with mutual respect, each contributing different experience and capacities to coexist peacefully.

Despite our shared history and common geography, reconciliation with First Nations culture remains elusive from everyday experience for many of us, and Design Build offers a form of collective experiential learning linked to the idea of embodied knowledge, intrinsic to First Nations culture and the means of passing on knowledge and skills from generation to generation.

It provides an opportunity for students to work directly with indigenous communities, collectively developing a design, carrying it through to the detailed level of working drawings, then subsequently testing and refining the project through prototyping, final prefabrication and on-site construction of a full scale permanent structure. By engaging with the cultural history of the Grand River valley and the relationships to land, natural habitat and heritage of both the Anishinabe whose territory this was traditionally, as well as the Iroquoian or Haudenosaunee peoples who have lived in the valley since the late 18th century, Design Build allows us to explore what role the process of architectural design and building can play in understanding, enhancing and strengthening the growth and goals of communities and cultures.

Both the Cambridge School of Architecture building and the main University of Waterloo campus sit within the Haldimand Tract treaty lands, ceded to the Iroquoian confederacy in 1784 for their service to the British Crown during the American Revolution. In the complex evolution of treaty lands, the Mississauga of the New Credit, the First Nation we'll mainly be working with for the duration of this course, have shifted locations

during the last century and now reside adjacent to the Six Nations Reserve near Hagersville on a small portion of the original Haldimand Tract.

The 2018 winter term graduate elective is the first part of an annual two-course sequence in which a design is carried through to the level of working drawings in anticipation of construction during summer or fall term option studio courses, allowing opportunities for the continued involvement of students with related thesis work.

The first iteration of the First Nations / University of Waterloo Design Build program was run in 2017, partnering with the Six Nations not-for-profit organization Kayanase, which is dedicated to the preservation of Iroquoian cultural heritage and natural habitats. The project involved design and construction of a 1200 square foot pavilion intended for teaching Iroquoian material craft traditions to elementary school children. It will provide a place for indigenous artists and craftspeople to transfer their culture through the making of tools, sporting equipment, decorative and votive objects - things like snow shoes and lacrosse sticks, cornhusk dolls, quill work and bead work. Students worked closely with First Nations community representatives for the siting and design of the building, and created prefabricated building components that will be erected by Kayanase in the coming months.

This year we will begin with hands-on building work in the School of Architecture workshop, collectively exploring the fundamental design build process of working together, through refining the design and making furnishings for the Kayanase Craft Pavilion, while also gaining exposure to the larger ideas of the design build program's connections with First Nations communities. Lectures and a symposium to be held in early February will present a broad range of ideas and discussion centered around indigenous culture, architecture and education. The symposium will be followed by a weekend long design charrette that will be the intensive start to our new project for the design of two Pow Wow ground shelters, working in conjunction with the Mississaugas of the New Credit First Nation.

The course will be divided into three main phases:

1. detail design and fabrication of furnishings for the Kayanase Craft Pavilion
2. design of two Pow Wow grounds open air pavilions for the Mississaugas of the New Credit
3. construction documents and project logistics for the Pow Wow grounds pavilions

Due to the specific circumstances of the 2018 design build project, there will be an opportunity for students in the winter term elective to be involved in a short on site build for the smaller of the two Pow Wow ground shelters, during the summer semester of 2018. During the process, there will be significant contact with the place and people for whom the building is being created at the Mississaugas of the New Credit territory.

COURSE STRUCTURE

The course is structured around primary activities of cultural research and experiential learning through design and construction. The symposium will present further background to cultural and territorial knowledge informing the work of the course, outlining topics related to Land and Ecology, Material Culture, First Nations Architecture, and Experiential Learning through a series of lectures and roundtable discussions:

- First Nations history, and treaty lands
- Story-telling and oral traditions
- Matriarchal lineage in Anishinabe and Haudenosaunee culture
- Material culture, making and crafts traditions

- Traditional Ecological Knowledge
- First Nations architecture across Turtle Island

The program for the term is ambitious and requires a significant commitment on the part of course participants. It is both an exciting opportunity to be involved with design of a full-scale construction of a building with a real client and program. It is also a substantial undertaking that requires an exceptional level of commitment with group work throughout the course of the term.

LEARNING OBJECTIVES

In conjunction with technical / construction details undertaken in the studio, students will produce building components that will be integrated into the larger whole building assembly and its final construction assembly on site.

1. Engage in critical evaluation of the role of architecture in response to First Nations cultural awareness through community programming, community development initiatives, building form and material expression over time.
2. Explore a variety of options for the design, technical development and detailing of a small scale public building, with consideration of an integrated and holistic relationship between concerns of environmental occupation, the judicious deployment of natural and manufactured materials, and the means of fabrication within a specific context.
3. Experience the processes of collaboration and consensus building, working with First Nations communities, consultants, fabricators, material and product suppliers, and each other.

EVALUATION

Project Phase	Grade value
P1. Prefabrication of furnishing and fitments for the craft pavilion	20%
P2. First Nations Frame and Skin Assignment	10%
P3. Design charrette and schematic to detailed pavilions design	35%
P4. Construction Documents	35%

Assessment is based on the studio instructors' comparative review of each student's contribution to the work of the group they are involved as well as the effectiveness of the group and the contribution of their part of the building to the larger whole building assembly. Assessment is gauged by; the ambition, clarity and appropriateness of contribution; quality and technical resolution of the work; effectiveness and the completeness of the element of the building the group is responsible for in design, detail development and construction documents of the whole building assembly. Participation within the overall group structure of the course is a critical element of the design build process, and a portion of the grade for each project will be based on the course instructors assessment of the visible participation of each individual's participation and contribution to their group's work.

REVIEWS

Given the nature of the design/build course, reviews will be carried out as consultation meetings with client representatives, determining if the project proposal meets cultural objectives, practical needs and technical requirements for the final pavilion assembly. There will be regular meetings for planning purposes to discuss the integration of the various component elements of the project, to ensure all aspects of the project are coordinated.

HAND-IN AND SUBMISSIONS

Students and the groups they are working within must complete building components to an acceptable level and obtain a passing average in order to receive credit for this course. As the course is based on collective work, active participation and engagement with the larger group for the purpose of completing the project will be the benchmark for successful participation in the course. In this sense grading is not the ideal measure of success of each students' participation and success in the studio, but grading is the required currency of university course work, so we will endeavor to bridge these two reference points without the grading becoming a distraction to the larger goals and ambitions of the course.

Documentation of the process and all aspects of the course, is important for a number of reasons: including students' portfolios, communication about and promotion of the design build program, and fundraising for the ongoing program requirements. This is considered a part of the course deliverables. We suggest that one or two members of the course take on the role of coordinating documentation of the work done in the studio, as well as keeping an up to date storage/ file system for managing photographic materials as well as other graphic material including the working drawings, and images of the completed project. Completion of this requirement will be assessed as part of the participation grade.

LATE WORK

All the work of the various groups will need to be completed in a timely manner, to ensure necessary coordination of the production of the course deliverables. Requests for extensions of agreed upon deadlines must be made as early as possible to the course coordinators and must be made in advance of the given completion phase.

SCHEDULE AND COURSE ATTENDANCE

The course runs Wednesday 2:00 – 5:00 pm

Class attendance and participation play a key part in the course and will be noted and evaluated by the instructors.

COMMUNICATION WITH STUDIO COORDINATOR

During the course of the term, the course coordinators will need to send communications to studio participants. It is required that each student confirm their current active email address with the Undergraduate Student Service Coordinator during the first week of class. Any official correspondence that must be addressed to the studio coordinators at the following email addresses:

pdowling@uwaterloo.ca

jcmcminn@uwaterloo.ca

RECOMMENDED READINGS

Recommended readings may be distributed at various stages throughout the term and as applicable will be held on reserve in the *Musagetes Library* for use by the class, or will be provided in pdf form. All students are encouraged to actively use the *Musagetes Library* collection and *recommended* readings.

ACADEMIC INTEGRITY AND AVOIDANCE OF ACADEMIC OFFENSES:

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 www.uwaterloo.ca/academicintegrity/ 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, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. 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 [check www.uwaterloo.ca/academicintegrity/] to avoid committing an academic offence, and to take responsibility for his/her actions. 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, www.adm.uwaterloo.ca/infosec/Policies/policy71.htm. For typical penalties check Guidelines for the Assessment of Penalties, www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm.

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) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm.

Note for Students with Disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, 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 the OPD at the beginning of each academic term.