FALL 2020

M2 Research Studio Options
SCHOOL OF ARCHITECTURE, PLANNING AND LANDSCAPE
UNIVERSITY OF CALGARY
M2 Studios for the fall of 2020 will include options developed in response to the cancellation of study abroad options for this fall. These options have been developed to take advantage of this moment in history when our enforced physical distance has reinforced the need to creatively design the ways in which we interact and collaborate as designers across the globe. This fall we are embarking on a new project in the architecture program. This project is one that connects students, faculty members, researchers and practitioners in teams to address the challenges that face our communities, cities, regions and nations through the lens of the discipline of architecture. This semester we have put out the call to local and international design thinkers to propose design research projects that we hope will provide some valuable experiences, networks and directions for your futures as designers.

A summary of each of these Work Integrated Learning/Critical Practice Studios is provided here to give each of you an idea of the range of projects that will be tackled this term. This semester will be an experiment in many ways. It will mark our first full term of studio to be undertaken in a hybridized physically distant way. It will be the first time that we interface in this way with architectural offices, developers, policy makers and builders from outside of SAPL and in some cases outside of Canada. It will be an opportunity for all of us to learn from the work taking place across all of these studio teams and project types. Our hope is that this will mark the start of a new set of collaborative networks that together will begin to tackle some of the most critical challenges and opportunities that face our discipline.
Course Description

This studio option addresses emergent design research topics that exist within critical practice under the guidance/mentorship of design professionals. These topics could take the form of the following:

- Embedded Critical Practice – Students working under the supervision of an architect or design team in a form on a specific R&D project or research subject.
- Design Build
- Speculative Critical Practice – Competitions, Project Proposals etc. that are speculative in nature.
- Critical Practice Urban Issues – Urban scale research and design proposals.
- Critical Practice Culture & Society – Research in the realms of social and cultural impacts of design practice.
- Disciplinary Theory – Work with theorist/critic on a specific topic with clear deliverables.

This list is not meant to be comprehensive, but strategic and students should review the attached documentation provided by each section for more details.

Participating Firms and Research Units

Center for Civilization
FarMor Architecture
FRANK Architecture & Interiors
Laboratory for Integrative Design
LIVE Mondo
MTA Urban Design Architecture Interior Design Inc.
MERCEDES + SINGH
MODERN OFFICE OF DESIGN + ARCHITECTURE
W/Purpose
Zaha Hadid Computation and Design (ZHCODE)

www.centerforcivilization.org
www.fmarch.ca
www.frankarchitecture.ca
www.integrativedesign.org
www.facebook.com/livemondocr
www.matlink.com
www.mercedesandsingh.com
www.moda.ca
www.wpurpose.com
www.zha-code.education.org
Solarpunk Urbanism: Farms, Forms, Flows and Flux

Instructor(s): Alberto de Salvatierra - SAPL
Aziz Barbar
Sonny Xu

Final Reviews
December 16 09:00-18:00

Project Description
This year has been one of extremes. Precipitating social upheaval—foregrounded by cataclysmic environmental degradation and accentuated by a deadly global pandemic—has revealed just how fragile and, perhaps, discordant humanity has become. Civilization has reached a critical inflection point. And at the threshold between perdition and redemption, loss of hope is easy. Apocalyptic visions and machinations of the future dominate our media. Every day, a new threat—often existential—assaults our screens. Forecasters and even fiction writers are hard-pressed to imagine a future that does not include a totalitarian state facilitated by a technological dystopia that failed to prevent a climate catastrophe. In the face of such insurmountable odds, what is the role of the designer, the architect, the urbanist? The answer lies in images. Our power is to imagine, and then design, new possibilities of the relations between human and nature. And there would be no more timely action then, than to breathe life into a nascent, yet plucky, literary genre known as “Solarpunk” that, having been borne from writers, lacks a cohesive imagery to galvanize the masses. Encouraging an optimistic version of our future, Solarpunk is a growing movement that envisions a society 1) built with renewable energies such as solar and wind power, 2) integrated with urban farming and natural ecologies, 3) embracing prefigurative politics and the twin values of pluralism and diversity, while 4) promoting self-sufficiency and decentralization of urban and governance systems. In the words of a crowd-assembled manifesto: “At its core, Solarpunk is a vision of a future that embodies the best of what humanity can achieve: a post-scarcity, post-hierarchy, post-capitalistic world where humanity sees itself as part of nature and clean energy replaces fossil fuels. The “punk” in Solarpunk is about rebellion, counterculture, post-capitalism, decolonialism and enthusiasm. Solarpunk embraces a diversity of tactics. Solarpunk emphasizes environmental sustainability and social justice. Solarpunk is about youth maker culture, local solutions, local energy grids, ways of creating autonomous functioning systems. Solarpunk includes all cultures, religions, abilities, sexes, genders and sexual identities. Solarpunk is the idea of humanity achieving a social evolution that embraces not just mere tolerance, but a more expansive compassion and acceptance.”

Students:
Andrew Burnyeat
Natalie Chung
Danielle Kim
Kayla MacDonald
Alexander Mayhew
Gordon Ngo
Edward Park
Anagha Patil
Rejwana Rahman
Alea Reid
Lealyn San Juan
Laura Sandor a
SEUNG HO RHEE
Mehakpreet Sidhu
Calvin Stuka

Jurors
• Josh Taron, SAPL (Calgary)
• Dan Hapton, SAPL (Calgary)
• Josh Vermillion, UNLV (Las Vegas)
• Samantha Solano, UMass Amherst (Amherst)
• Dima Rachid, Studio Libani (Beirut)
• Aziz Barbar, Alden Studios (Monrovia)
• Sonny Xu, STOSS Landscape Urbanism (Boston)
• Grace Suthata Jiranuntarat, STOSS Landscape Urbanism (Boston)
• Binh Nguyen, Studio Lolo (Los Angeles)

Background Links
www.centerforcivilization.org
FRANK Architecture

The Architecture of Story Telling

Instructor(s): Kate Allen
Kelly Morrison
Kristen Lien

Final Reviews
December 17 09:00-13:00
https://global.gotomeeting.com/join/191121573
You can also dial in using your phone.
Canada: +1 (647) 497-9391
Access Code: 191-121-573

Project Description
This course is the fifth studio in the Master of Architecture Program sequence and will explore social space, adaptive re-use and storytelling. Student research will run in parallel to ‘The Royal Hotel’ project in our office, with the goal of expanding our thinking by exploring potential narratives through site/context (cultural, social, geographical) response while fulfilling the parameters of the client brief. The studio will teach iterative design that grows from the framework and/or idea the client brings to the architect, with the goal to embellish and accentuate that vision functionally and aesthetically. We will encourage collaboration and conversation between course work and project work in the office.

Site / Program
The Royal Hotel, located in Fernie, BC was built following the Fernie fire of 1908. The building currently houses low income residential suites, with run-down hospitality offerings on the main level. This hotel is being renovated / redeveloped by a private ownership group in response to an influx of tourism over recent years.

The building program will include a combination of hospitality (food and beverage) and residential offerings. FRANK Architecture will be involved in a collaborative process to develop the hotel concept and design the interior fit-out.

Students will be challenged to explore the potential of this project by developing a design narrative unique to their individual interpretation, pursuing their research through a directed approach to design development.

Themes may include: Historic preservation, displacement, themed architecture, social/cultural/economic impacts of design intervention, experiential design, placemaking

Students:
Joe Crawford
Michael Gross
Isabelle Jackson
Madisen Killingsworth
Hannah Mousek
Joy Olagoke
Sara Sparks

Jurors
Kate Thompson - CMLC, Calgary
Matthew North - HouseBrand, Calgary

Background Links
https://www.frankarchitecture.ca
Site Information
https://search-bcarchives.royalbcmuseum.bc.ca/royal-hotel-baker-avenue-fernie
Hospitality Design Precedents
https://www.avroko.com
http://www.romanandwilliams.com/about-us
Adaptive re-use – Historic Precedents
https://kingeddy.ca
https://cspacekingedward.com
https://www.frankarchitecture.ca/portfolio-item/model-milk/
Project Description

Although Canada is a mosaic of many cultures, this beautiful diversity is often not reflected in the built environment. This is in large due to the mass-produced building materials and commercialized architecture resulting into a monotonous urban sprawl that is void of any extensive cultural connections to the community in which it resides. As a result, architecture’s ability to be more vocal of the local context is limited to a small selection of materials readily available as “off the shelf” and subsequently comes to very closely resemble one another regardless of the context, city or country. More and more, we are forced to rely on residual pieces of land left behind by gentrification to develop them into unique places that have a sense of self identity and community expression. Although these can be amazing public realms that can thrive and eventually become welcoming dwelling points to passersby, they often lack an architectural element that goes beyond commemorative statues and benches with plaques.

To address this, students will be asked to research, analyze, and discuss a community’s cultural facets through the lenses of history, density, typology, demographics and character. Furthermore, they will address and challenge certain established facets in the form of an intervention on a select site. Students will be encouraged to use a wide range of CAD software and digital fabrication technologies to develop their pavilion design and demonstrate its construction. This course will explore the themes and facets of culture within the Canadian context and how it can take shape in the form of a pavilion that can be utilized by members of the public throughout the year. The desired project will be a design for a structure that bridges public art and architecture.
FLCA is partnering with the SAPL studio to design a Cultural Pavilion.

Do you like the idea?
Project Description
The ceiling as an architectural device has a long historical tradition in the discipline. This studio will examine that history through a series of precedent studies that focus on the roles that patterns and materiality play specific to two aspects of the surfaces over our heads: Spatial Definition and Acoustic Performance.

The studio will explore these through a process of digital simulation and physical prototypes. The client for these projects is the University of Calgary with support from the Student Wellness Program. The studio will explore a number of spaces that are currently inadequately designed for acoustic performance and require remediation measures to increase their functionality across several functions. These requirements will co-exist with aesthetic considerations developed by the studio through simulation techniques that investigate pattern and materiality as tools for controlling sound and creating spatial demarcation.
URBAN ENTREPRENEURSHIP DETROIT

Instructor(s): Wil D. Marquez
Michael Mondo

Final Reviews
Final Projects will be posted on Instagram

#SAPL313

Project Description

While Detroit’s rebirth can be traced to a family of companies and the survival of expert citizens whose “never quit” or “we never left” mantra is hard to ignore or miss across the urban landscape. While the Detroit revival may be attributed to focused investment in its core, the development of marquee community projects in key neighborhoods like Midtown, E. Riverfront, Brush Park, or Corktown are also moving Detroit forward at an impressive pace.

This embedded critical practice studio experience will explore two unique projects in Detroit. The differences between the two sites highlight an opportunity to explore urban scale, urban community development, environment and new ways of living. The research completed in this practice expands on existing and ongoing work by two design entrepreneurs with unique backgrounds and ways of working.

The outcomes will advance students’ representational competency, while developing skills to critically analyze ways architecture and social entrepreneurship can influence change and understanding. We hope this studio will invite students to use the process to expand their expectations on how to work in today’s world, while tackling real design challenges.

The research will explore contemporary issues regarding housing, environment, landbanking, connectivity, and issues related to how people live, work, and play in the future. The goal of this studio is to explore new development ideologies, expand our understanding of urban systems and development, and educate ourselves by facilitating a professional feedback loop with guest speakers, experts, and citizens.

Students:
Thomas James Acheson
Elizabeth Cook
Kylene Dupuis
Lindsey Harbord
Dalvir Nanara
Yagmur Yurtbulmus

Background Links & Resources
Garden Court
Detroit Riverfront Area
East Riverfront | City of Detroit
East Riverfront Report | City of Detroit
East Riverfront Development
East Riverfront Development News
Detroit Development Trends
Garden Court Apartments
Garden Court Metro News
Garden Court Metro News

NW Goldberg
Detroit Rehabilitation Zone
NW Goldberg | City of Detroit
NW Goldberg Cares | City of Detroit
NW Goldberg Model Media
NW Goldberg Revitalization Plan MSU
NW Goldberg Mixed Development
"The goal of this studio is to explore new development ideologies, expand our understanding of urban systems, and execute a strategy."
Prefabricated Hybrids

Instructor(s): Sumer Singh

Final Reviews
December 17 15:30-17:30
Zoom TBD.

Project Description

Architecture as a discipline is fast evolving, especially through the decontextualization and grounding of research from other disciplines. With the advent of Industry 4.0, we have an opportunity to apply mass customization at every scale of AEC (Architecture, Engineering, and Construction) projects. The research project at Mercedes and Singh does exactly that through the adaptation of BIM equivalent modular design strategies from other disciplines, and applying them to parametric models of contemporary architecture and design. The goal of this studio is to identify, research, and create new models of approaching AEC projects.

The research started with primary investigations into modular and prefabricated construction, logistics, lifting, and guest talks. This was supplemented by technical software tutorials, fabrication exercises, and lectures. This was further translated into applied research and digital/physical toolkit creation, demonstrated using case studies of Architectural typologies at various scales.

Students:

Jessica Adamson
Shelby Christensen
Gurkaran Dhaliwal
Xuefei Wang

Jurors
TBD

Background Links & Resources


https://www.youtube.com/watch?v=PHPfKeMvs-w


https://dfabhouse.ch/

Isamu Noguchi’s “An Important and Unique Table for Mr. and Mrs. Samuel C. Dretzin, 1948-1949”

Sources and Derivatives
City within a City:
Reanimating Edmonton’s High Level Line

Instructors: Dustin Couzens
Michael Rivest

Final Reviews
December 18 09:00-12:00

Join Zoom Meeting
https://ucalgary.zoom.us/j/95306881084
Meeting ID: 953 0688 1084
Passcode: 551904

Project Description

We began our studio under the premise that the antiquated principles/philosophies by which we continue to design, organize and govern our cities no longer aligns with the fluidity, temporality and indeterminacy of the contemporary condition. The studio produced a highly utopic Master Plan for Edmonton’s High Level Line that eschews traditional, endemic ideologies associated with cartesianism, planar vs. sectional spatiality, mutual exclusivity of public/private space, siloized zoning and centralized governance. The second half of the semester shifted scales, proposing various architectural/infrastructural ‘test fits’ situated within the confines of our master plan. Common themes being explored across the studio involve; repositioning architecture as an ecology vs. static artifice, elevating/privileging the rural in our urban environments, typological hybridizations, preference towards threshold vs. boundary, temporality vs. stasis, episodic or time/event-based evolution, etc.

Students:
John Baziuk
Brennan Black
Dustin Dodd
Alana Kerr
Jonathan Monfries
Vijul Shah
Faezeh Yousefi

Jurors
-Bernard Klumper (M0DA)
-Michael Zabinski (Dialog + HLL Society)
-Mikkel Bogh (EFFEKT – Copenhagen)
-Trevor Boddy (TBD)

Background Links & Resources

www.moda.ca
www.highlevelline.com
www.vanalen.org/project/reimagining-brooklyn-bridge/
www.effekt.dk
EMPATHY AND COMMUNITY IN ARCHITECTURE

Instructor(s): Jeff Lyness

Final Reviews
December 18 11:00-13:00

https://us02web.zoom.us/j/85355477972?pwd=RmpWWXRoOXPqGUVVUmRvSk1XS0V1Zz09

Meeting ID: 853 5547 7972
Passcode: 390170

Project Description
We are a precipice in social consciousness that demands a cultural shift in how we respond to the built environment through a more human centric focus. We have a responsibility not only to ourselves but to others and more importantly future generations to proactively respond to the social realities of our current time. With affordable Housing as a programmatic basis the studio is an exploration of the notions of empathy and community in a human centric approach to design can have a positive impact on the physical environment. The resulting projects being the embodiment of the determined ideals of the students.

Students:
Caleb Hildenbrandt
ugonna Ohakim
John Rivera
Destiny Kirumira
Mojdeh Kamali
Ryan Austin
Mona Asadi

Jurors
Bryan Gartner – MTA
Alison MacLachlan – MTA
Audrina Lim – MTA
Medhat Hanna - City of Calgary Affordable Housing
Madyson Mackay - City of Calgary Affordable Housing
Zaha Hadid Computation and Design (ZHCODE)

MASS TIMBER HOUSING

Instructor(s): Shajay Bhooshan

Final Reviews
December 18 13:30-14:30

Join Zoom Meeting
https://ucalgary.zoom.us/j/91520542196
Meeting ID: 915 2054 2196
Passcode: 579566

Project Description

ZHCODE is a practise-embedded research group focussing on strategic innovations that bridge from disciplinary advances to industrial applications. Our work, guided by our deeply held values of future oriented design also learns from the wisdoms of the past – particularly local and vernacular wisdoms in masonry and timber construction, climatic appropriateness and spatial arrangements and details.

The aesthetics of our designs is a consequence of its physical and social high-performance. They are powered by state-of-the-art, proprietary parametric design software and extensions along with game-engine based, web-integrated, participatory technologies. These tools are a result of over 13 years of dedicated and field-ready research spanning computer graphics, digital design, maturing robotic construction technologies, and historical construction in timber and masonry.

What:
A design research project at the intersection of modern methods of design and construction in timber and vernacular building and material cultures on Canada, particularly Alberta and British Columbia.

Background:
-Geometry based methods of reasoning about shape and construction
-Advances in Digital Manufacturing and Industrial Construction in Architecture.
-Advances in digital design technologies in Architecture
-Need and desires for localisation and cultural adaptation in Architectural proposals

Application domains:
Multi-generational housing or high-value public buildings such as arenas, museums etc.

Students:
Rutvi Gajjar
Darryl Pollock
Ji Sun

Jurors
TBD

Background Links & Resources
ZHCODE
http://www.zha-code-education.org/
https://www.instagram.com/shajay /
https://www.instagram.com/zhcode/
https://www.archdaily.com/801031/mathematics-the-winton-gallery-zaha-hadid-architects
https://www.facebook.com/watch/?v=1027996530871439
https://www.digitalfutures.world/workshops-europe-mideast-africa-blog/zhacode

AADRL
http://livingdisruptions.london/?page_id=1940
https://www.autodesk.com/redshift/future-of-urban-housing/

ETHZ
https://block.arch.ethz.ch/brg/people/shajay-bhooshan